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ABSTRACT

Reports on the current status of public education in Utah's public schools called for educational reform dealing with curriculum, instruction, student activities, preparation of teachers, inservicing administrators, and modes for improving teacher pay. A series of meetings held by educators, conferences, and visits throughout the state provided materials for the development of goals for the curriculum in the schools. Increased units of credit for secondary schools were cited, and specific core curricula in language arts, mathematics, science, social studies, arts, information technology, vocational education, and healthy life-styles in levels K-12 were developed. The intent of this field trial document is to gather further data regarding the skills, concepts, and attitudes identified as an essential "core" for all students in the context of the realities of the classroom. Continued dialogue will be maintained throughout the 1985-86 school year and the data gathered will be used to finalize the core document. (JD)

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INTRODUCTION

Public education in Utah came under intense scrutiny during 1983 and 1984. Prodded by a report from the National Commission on Excellence in Education, A Nation At Risk: The Imperative for Educational Reform, state leaders established two blue ribbon committees to study and make recommendations for improving the quality of education in Utah. One report, Education in Utah: A Call to Action, November 1983, came from the Utah Education Reform Steering Committee appointed by Governor Scott M. Matheson. The second, Report of the Commission on Educational Excellence, October 1983, came from the Utah State Board of Education's study committee. Both reports called for educational reform dealing with curriculum, instruction, student activities, preparation of teachers, inservicing administrators and modes for improving teacher pay.

Early in the fiscal year, several major conferences aimed at educational reform were held. This included a meeting at Murray High School for all elected school board members, a meeting at Brigham Young University for all school administrators (Superintendents, district office staff, and principals), and a meeting at the Utah State Office of Education for district curriculum directors. During November and early December, a team of five staff members from the Office of Curriculum and Instruction toured the entire state seeking input on 25 issues of reform identified in the state reports. Suggestions came from students, parents, teachers, administrators, school board members, and others.

After months of study, visits throughout the state, conferences, on-site visits, etc., during 1983, the Curriculum and Instruction staff prepared a suggested educational reform package for consideration by the State Board of Education in January 1984.

On January 6, 1984, the Utah State Board of Education adopted a new policy entitled "Elementary and Secondary Program of Studies and Graduation Requirements," which reflected a synthesis of the numerous input sessions of the previous six months in concert with the goals for excellence of the State Board of Education.

The new policy required increased units of credit for the secondary schools of Utah, but more importantly mandated the identification of a specific core curriculum in language arts, mathematics, science, social studies, arts, information technology, vocational education and healthy life-styles in levels K-12 which should be mastered by all students.

In response to this request from the Board, the Office of Curriculum and Instruction launched an all-out effort to involve educators across the state in the identification of the core body of skills, concepts, and attitudes which make up the foundation needed by all students as a basis for future choices.

A major segment of this effort was the involvement of nearly 400 educators in a series of week-long workshops in which a draft document of the core curriculum was developed. Visits to each of the districts of the state and subsequent refinement sessions have resulted in this document which is being distributed to the district for a "field trial."

The intent of the field trial is to gather further data regarding the skills, concepts, and attitudes identified as an essential "core" for all students in the context of the realities of the classroom. The 1985-86 school year has been designated for this trial period. Specific methods of data collection will be communicated to districts. The continuing collaborative nature of this endeavor is vitally important to ensure the quality of the product. Continued dialogue will be matained throughout the 1985-86 school year. The data gathered will be used to finalize the core document.

STATE BOARD OF EDUCATION

☒ New Date of Adoption 1-6-84	☐ Revised Date	Descriptor Code:

THE ELEMENTARY AND SECONDARY SCHOOL PROGRAM OF STUDIES AND HIGH SCHOOL GRADUATION REQUIREMENTS

STATEMENT OF PHILOSOPHY

The primary goal of education is the development of individuals who possess the knowledge, skills, and human characteristics necessary to enable them to live meaningfully as individuals and as positive contributors to society. To achieve this ultimate goal, the individual must be provided experiences to develop skills in language and thinking, scientific understanding, mathematics, historical perception, aesthetic appreciation, social interaction, movement, fitness and health, and career competencies.

Elementary Education

The elementary school reaches the greatest number of students for a longer period of time during the most formative years of the school experience. This unparalleled responsibility makes it imperative that each elementary school be provided with effective leadership, meaningful standards, a balanced curriculum, sufficient means, and competent staff.

Secondary Education

The secondary school should provide the opportunity for every student to have a challenging educational experience which will prepare him/her to pursue a fulfilling and productive role in society, which both transmits and enhances our culture. A comprehensive curriculum with enough flexibility to strengthen individual talents and interests must be available for all students.

AUTHORITY TO MAKE POLICY

Authority and responsibility to make policy and set standards in the area of secondary school graduation requirements rest with the State Board of Education by virtue of its constitutional mandate to provide general control and supervision of the public school system (Article X, Section 8) and by specific legislative enactment found in the Utah Code Annotated, 1953, Sections 53-2-29, 53-2-30, and 53-7-15. The statutes cited also indicate an intended partnership arrangement between the State Board of Education and local school districts.

Section 53-2-29 explicitly states: ". . . the State Board of Education shall by rule fix the standards upon which, and the period during the year that, high schools shall be maintained."

Section 53-2-30 in part states: "The State Board of Education . . . shall have power to determine whether the quality of education offered in each school district justifies support from state school funds."

Section 53-7-15 stipulates that: ". . . although the establishment of an educational system is primarily a state function, local school districts should be required to participate on a partnership basis in the payment of a reasonable portion of the cost of the minimum program . . . . Additionally, this act recognized that each locality should be empowered to provide educational facilities and opportunities beyond the minimum program . . . ."

POLICY STATEMENT

Elementary Education

It is the policy of the State Board of Education to establish standards for elementary education which include the identification of a core curriculum. Implementation and formal assessment of student mastery of the core curriculum including the foundation skills is the responsibility of the local boards of education. Formal assessment shall occur during or at the completion of the primary grades (3) and again during or at the completion of the intermediate grades (6). Informal assessment should occur on a frequent ongoing basis to ensure continual student progress. Provision for remediation for all students who fall short of mastery is required.

It is recommended that districts utilize an outcome-based curriculum rather than identifying pre-determined time allotments for subject areas and that students be flexibly scheduled into appropriate task oriented groups.

REQUIRED ELEMENTARY CORE CURRICULUM

GRADES K-6

Requirements

- READING
- WRITING
- SPEAKING
- LISTENING
- PROBLEM SOLVING
- MATHEMATICS
- SCIENCE
- SOCIAL STUDIES
  - INTRODUCTORY CITIZENSHIP PRINCIPLES AND PRACTICES
- ARTS
- MOVEMENT, FITNESS, AND HEALTH
- COMPUTER LITERACY*

Options

- FOREIGN LANGUAGE

Mastery of foundation skills in reading, writing, speaking, listening, arithmetic, and problem solving shall be achieved by the completion of the sixth grade.

All handicapped students are required to demonstrate mastery of the core curriculum and foundation skills. In the event that a student's handicapping condition precludes the successful demonstration of mastery, the IEP team, on a case by case basis, may exempt the student or modify the mastery demonstration to accommodate the student's handicap.

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* Recognizing the complexities of acquiring sufficient hardware as well as providing adequate training for teachers, it is recommended that districts submit to the State Board of Education a Phased Implementation Program to be completed for Computer Literacy compatible with their individual needs. Implementation shall be completed by September, 1988.

POLICY STATEMENT

Middle School and High School

It is the policy of the State Board of Education to provide general direction and standards in secondary education. Students in grades seven and eight will earn a minimum of 12 units of credit, and each student in grade nine to twelve will earn a minimum of 24 units of credit. However, districts may require more. Formal assessment of student mastery of the core courses shall occur during or at the completion of grades eight, ten, and twelve. Implementation of the core components are the responsibilities of local boards of education. These requirements will be effective no later than the graduating class of 1988.

MIDDLE EDUCATION PROGRAM OF STUDIES
GRADES 7-8 12 UNITS REQUIRED

GENERAL CORE - 12 Units		RECOMMENDED OPTIONS
Subject Areas	Requirements	Recommended
ENGLISH	2.0	Exploratory or specialty courses in any of the subjects listed in the required core
MATH	2.0	
SCIENCE	1.5	
SOCIAL STUDIES	1.5	FOREIGN LANGUAGE
THE ARTS	1.0	READING
COMPUTER LITERACY*	.5	
MOVEMENT, FITNESS, AND HEALTH	1.5	
PRE-VOCATIONAL EXPLORATION	1.0	
LOCAL DISTRICT OPTION	1.0	

Mastery of foundation skills in the processes and structure of democratic governance and consumer skills shall be achieved at the completion of the eighth grade.

All handicapped students are required to demonstrate mastery of the courses in the general core. In the event that a student's handicapping condition precludes the successful demonstration of mastery, the IEP team, on a case by case basis, may exempt the student or modify the competency demonstration to accommodate the student's handicap.

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* Recognizing the complexities of acquiring sufficient hardware as well as providing adequate training for teachers, it is recommended that districts submit a Phased Implementation Program for Computer Literacy compatible with their individual needs. Implementation shall be completed by September, 1988.

HIGH SCHOOL PROGRAM OF STUDIES

GRADES 9-12 24 UNITS REQUIRED*

GENERAL CORE - 15 Units	PLUS	REQUIRED ELECTIVES - 9 Units	
Subject Areas	Requirements	Options	Recommended
ENGLISH	3.0	HIGH INTEREST CLUSTER	9.0
		Selected Electives	
MATH	2.0		
		- OR -	
SCIENCE	2.0		
		COLLEGE ENTRY CLUSTER	
COMPUTER STUDIES**	.5	FOREIGN LANGUAGE	2.0
		MATHEMATICS	1.0
		ENGLISH	1.0
SOCIAL STUDIES	3.0	SCIENCE	1.0
		ELECTIVES	4.0
ARTS	1.5	- OR -	
		TECHNOLOGY/VOCATIONAL/JOB ENTRY CLUSTERS	
HEALTHY LIFE-STYLES AND FITNESS	2.0		
		Select one:	
		TECHNICAL CORE	4.0
		VOCATIONAL CORE	5.0
VOCATIONAL EDUCATION	1.0	JOB ENTRY CORE	5.0
		COMPUTER SCIENCE	.5
		ELECTIVES	3.5 - 4.5

All handicapped students are required to demonstrate mastery of the courses in the general core. In the event that a student's handicapping condition precludes the successful demonstration of mastery, the IEP team, on a case by case basis, may exempt the student or modify the competency demonstration to accommodate the student's handicap.

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* See unit of credit definition page 5.

**This requirement may be redundant and need to be changed as computer literacy in the elementary curriculum becomes operational.

GENERAL REQUIREMENTS

COURSE STANDARDS

The State Board of Education will establish minimum course description standards for each course in the required general core. The Board is concerned not only about what courses should be required but also about the content and quality of such courses. The Board places great importance on having students achieve mastery in contrast to having them complete certain amounts of seat time. The course descriptions, and mastery criteria when completed, will be an integral part of the Board's policy.

Implementation and assessment procedures will remain the responsibility of the local boards of education. Course descriptions for both required and optional courses will be a cooperative effort of local school districts and the Utah State Office of Education. Upon their completion and acceptance by the State Board of Education, they will become part of the state standards for educational policy.

Beginning with the 1988-89 school year, teachers will not be assigned to teach any required course unless they hold a current Utah teaching certificate, have completed an undergraduate or graduate major or minor, completed a State Board of Education approved inservice program or demonstrated competency in the subject area.

UNIT OF CREDIT

A unit of credit or fraction thereof shall be given upon satisfactory completion of a course or learning experience in compliance with state course standards. Students also may complete a course on a performance basis in which case assessment of mastery will be the responsibility of the local boards of education. Credit can be awarded only once for a specific required course with the same content during the secondary school experience.

Ways of earning credit:

- Successful completion of course, or
- Demonstrated proficiency, via preassessment, or
- Demonstrated mastery of approved courses outside of school day or year, or
- Concurrent enrollment in approved post-secondary training institutions, or
- Demonstrated mastery of approved correspondence or extension courses, or
- Upon application, demonstrated mastery in special experimental programs.

INSTRUCTIONAL TIME

Implementation of outcome-based curriculum requires options for school districts to organize flexible time blocks for instruction. Previous time suggestions or standards (kindergarten--750 minutes per week, grades 1 through 6--1650 minutes per week, and grades 7 through 12--150 hours per unit of credit) are now guidelines. They were based upon the approximate time needed to complete a subject or course. To help the State Board of Education keep apprised of instructional time variations, districts shall submit their instructional time schedule to the Utah State Office of Education for review.

STUDENT EDUCATION PLAN

A student education plan will be developed cooperatively by the student, designated school personnel, and parents. This plan will be guided by the general requirements; individual student interests and goals; and be formally reviewed in at least the beginning of grade 1 and at the end of grades 3 and 6 and annually thereafter. Each student's high school plan will identify an area of concentration (perhaps as much as four to five units) in a cluster related to his/her post-secondary goal.

DIPLOMA

In Utah's public schools, a high school diploma shall be granted to a student who has met the State Board of Education requirements and any additional requirements of the local school district.

PROGRAM OF STUDIES

GENERAL CORE CURRICULUM REQUIREMENTS

▨ BASIC CORE COMMON TO ALL STUDENTS

☐ ALTERNATIVE CORE OPTIONS TO COMPLETE CORE REQUIREMENTS*

LEVEL	0-6	7-8	9-12
LANGUAGE ARTS EDUCATION	▨	▨ 2.0 UNITS	▨ 3.0 UNITS
MATHEMATICS	▨	2.0 UNITS	2.0 UNITS
SCIENCE	▨	▨ 1.5 UNITS	2.0 UNITS
SOCIAL STUDIES	▨	▨ 1.5 UNITS	3.0 UNITS ▨ 2.0 1.0
THE ARTS	▨	▨ 1.0 UNIT	1.5 UNITS
INFORMATION TECHNOLOGY	▨ FLEXIBLE TIME FRAME		
MOVEMENT, FITNESS, AND HEALTH	▨	▨ 1.5 UNITS	2.0 UNITS ▨ 1.5 .5
VOCATIONAL	NO REQUIREMENTS	1.0 UNIT ▨ .5 .5	▨ 1.0 UNIT

*See subject area course charts for details

Section A

LANGUAGE ARTS EDUCATION

RECOMMENDED

FIELD TRIAL

ENGLISH/LANGUAGE ARTS CORE CURRICULUM

Thinking, Reading, Writing, Speaking, and Listening Skills

Levels K-3

mastery

Levels 4-6

mastery

Levels 7-8

2.0 UNITS

mastery

Levels 9-12

3.0 UNITS

CORE CURRICULUM FOR LANGUAGE ARTS EDUCATION

PREFACE The purpose of language arts core education is to help students attain language skills that generate and communicate thinking and that provide students with the ability to learn about themselves, their environment, and their relationship with others. The core is the basic portion of the language arts curriculum required for all students and may be supplemented by the teacher. The rationale for this document is based on research and represents a shift of emphasis from teaching isolated content and skills to a process-oriented program.

Rationale

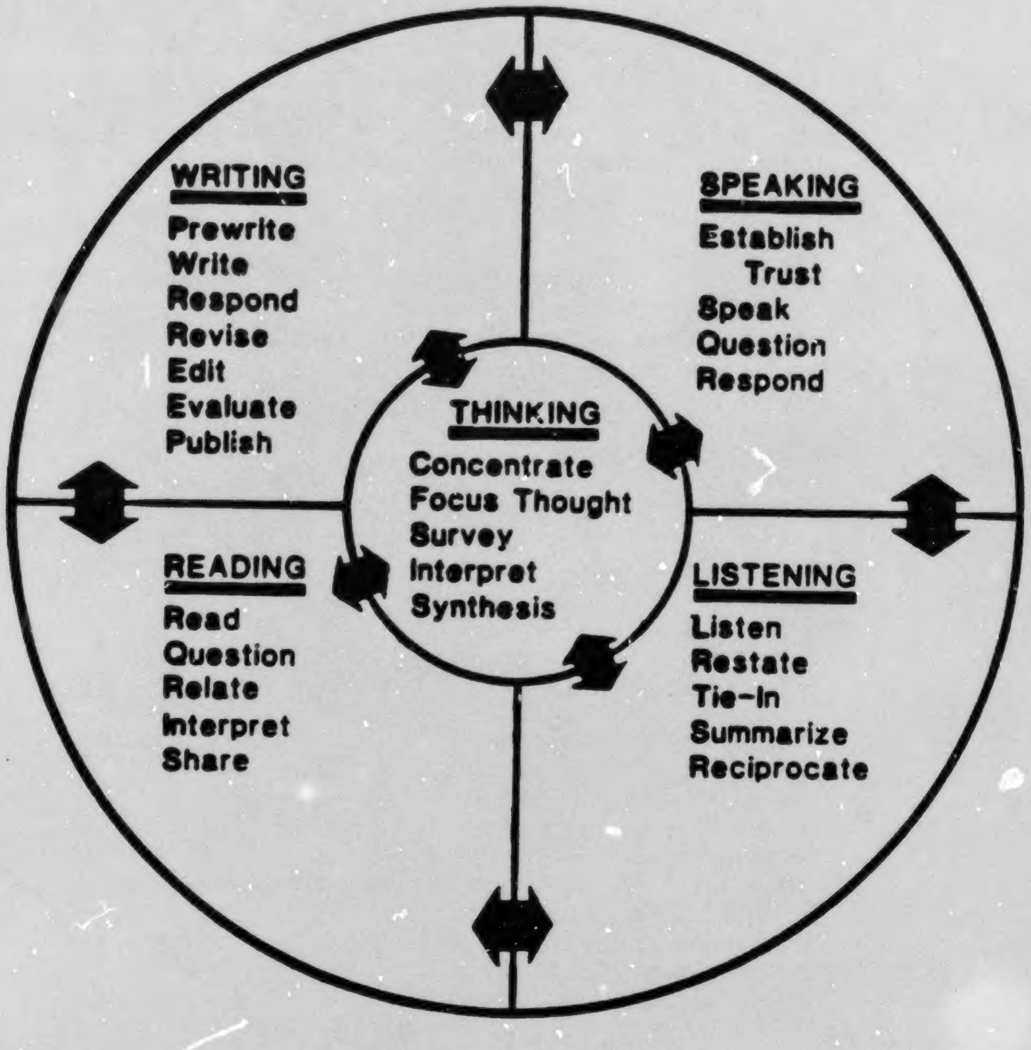
1. Thinking, reading, writing, speaking and listening, all interrelated process, are the core of the curriculum--

   These activities represent an integrated whole, parts of which are experienced in isolation, but which generally interrelate and act in concert. The thinking process is concerned with advancing levels of abstraction, maximizing concentration, focusing random knowledge, and synthesizing data into logical, coherent trains of thought. The speaking and listening processes focus and communicate thoughts by fostering discussion skills. The reading and writing processes further refine thinking and communication. (Often, the writing process, which includes pre-writing, writing, responding, reviewing, editing, evaluation, and sharing, is the most substantive proof of learning.) Taken together, these process are the essence of all learning and humanity.

2. Language skills cannot be productively taught in isolation, particularly through the insular study of traditional, structural, or transformational grammar--

   Students need daily opportunities to develop related language skills. Students develop skills by practicing them, but no skill nor individual content material should be practiced in isolation. Spelling, mechanics, usage, and vocabulary study should generally be derived from and related to the literature selections and students' writing (Hillocks, 1983).

   Traditionally, mechanics and usage have been taught for their own sake, apart from reading and writing. Research shows that mechanics, usage, spelling, and vocabulary are important as content when they are taught as an integral part of the writing process (Cooper,


WRITING
Prewrite
Write
Respond
Revise
Edit
Evaluate
Publish
SPEAKING
Establish Trust
Speak
Question
Respond
THINKING
Concentrate
Focus Thought
Survey
Interpret
Synthesis
READING
Read
Question
Relate
Interpret
Share
LISTENING
Listen
Restate
Tie-In
Summarize
Reciprocate

1974; Cooper, 1983; Odell, 1974). When in the revising or editing stages, the need for correct usage, spelling, and mechanics emerges, the necessary skill can then be productively taught (Emig, 1971).

The instruction of formal grammar, when not directly related with the writing, reading, and speaking processes, does not help students develop communication skills. Furthermore, researchers have incontrovertibly concluded that in programs in which excessive time is devoted to the study of grammar, independent of the reading and writing processes, the effects are negative. It may be helpful for students to have a knowledge of grammatical terminology when it is taught in the context of their own writing, reading, and speaking. In the words of William Irmsher, Past-president of the National Council of Teachers of english, "Few grammarians are writers, but all writers are grammarians." In summary, skill attainment through process is paramount, content is secondary.

3. Language skills stretch across all mastery levels and subject areas--

   Although development of language skills is a life-long process, students can demonstrate appropriate progress for each grade level.

   The teaching of effective language skills is a shared responsibility, involving all teachers in all subject areas, administrators, and parents. These skills are taught, reinforced, and expanded repeatedly through all mastery levels. The ultimate goal is the student's personal commitment to effective thinking and communication.

4. In general, the developmental sequence of language skills is: Fluency ---- Specificity ---- Abstractions.

   Students must be able to produce and comprehend ample amounts of language before specifity can be effectively taught. Then students must learn to articulate and comprehend specific language before tackling abstractions in language. That is, when learning to write, student must first produce several paragraphs before moving to specific language that brings writing to life. From concrete, vivid language the students can then go forward to language that has no physical referent (e.g., truth, justice, freedom) and employs calculated rhetorical strategies, including logic.

George Hillocks. Paper presented at the Annual Convention of the NCTE, Denver, Colorado, November 20-24, 1983. Available on request from the author, Departments of English and Education, University of Chicago, Chicago, Illinois.

Charles R. Cooper, "Research Roundup: Oral and Written Composition," English Journal, Vol. 63 (September, 1974), 102

Charles R. Cooper, "Research Roundup: Oral and Written Composition," English Journal, Vol. 62 (November, 1973), 1,202.

Lee Odell, "Measuring the Effect of Instruction in Pre-Writing," Research in the Teaching of English, Vol. 8 (fall, 1974), 240.

Janet Emig, The Composing Processes of Twelfth Graders. Urbanna, Ill.: National Council of Teachers of English, 1971, 98-99.

FIELD TRIAL

CORE CURRICULUM FOR LANGUAGE ARTS EDUCATION

K - 3

COURSE DESCRIPTION

The course of study for language arts (K-3) will ensure that each student will have mastered the basic skills of listening, speaking, reading, spelling, and penmanship. Through oral and written language, students will develop and expand their concepts of themselves, people, places, and events in the world around them.

LEVEL K

STANDARD 1	The students will learn to attend to verbal information. (LISTENING)

OBJECTIVES

1. Pay attention to teacher or another person who is speaking.
2. Follow one- and two-step directions after hearing them once.
3. Recall specific information.
4. Recall information in sequence.
5. Demonstrate comprehension of literary selections read aloud.

STANDARD 2	The students will share their thoughts in speech, using vocabulary appropriate to age and situation. (SPEAKING)

OBJECTIVES

1. Enunciate sounds so others can understand what is said.
2. Speak with the appropriate volume for the situation.
3. Recite correctly their name, address, and telephone number.
4. Sing short songs and recite short poems for memory.
5. Report events in a sequential order.
6. Tell how things look, feel, sound, taste, and smell.

STANDARD 3	The students will learn the auditory and visual discrimination skills necessary to master letter recognition and understand sound-symbol relationships. (READING)

OBJECTIVES

1. Discriminate visual and auditory likenesses and differences.
2. Identify upper and lower case letters by name and by sound.
3. Demonstrate left-to-right, top-to-bottom, front-to-back orientation.
4. Associate spoken words with written form through experience charts and similar activities.

STANDARD 4	The students will become familiar with different kinds of literature and will be able to respond creatively through art, music, drama, and dance. (LITERATURE)

OBJECTIVES

1. Help select materials to be read aloud to them.
2. Respond to a variety of nursery rhymes, poems, stories, and picture books; e.g., draw a picture, sing a song, make simple puppets, and participate in role playing.

STANDARD 5	The students will develop spelling readiness skills. (SPELLING)

OBJECTIVES

1. Recognize that letters represent sounds in words.
2. Recognize that letters are arranged in left-to-right sequence to form words.
3. Recognize their name in print.

4. Spell their first name.

STANDARD 6

The students will print legibly, using the correct formation of the manuscript letters. (PENMANSHIP)

OBJECTIVES

1. Form manuscript letters.
2. Write name correctly.
3. Leave appropriate spaces between letters and words.
4. Form digits 0 to 9.

STANDARD 7

The students will dictate individual and group compositions to be recorded in written form for sharing. (WRITTEN COMPOSITION)

OBJECTIVES

1. Dictate words, sentences, stories, and experiences to be recorded in written form.
2. Participate in small group discussions about the recorded events.

LEVEL 1

STANDARD 1	The students will attend to verbal information for longer periods of time and demonstrate literal understanding. (LISTENING)

OBJECTIVES

1. Pay attention to the teacher or to others who are speaking or presenting.
2. Listen to information without interrupting.
3. Follow two- and three-step directions after hearing them once.
4. Recall specific information.
5. Recall information in sequence.
6. Demonstrate comprehension of literary selections read aloud.

STANDARD 2	The students will share their thoughts effectively in speech, using vocabulary appropriate to age and situation. (SPEAKING)

OBJECTIVES

1. Speak with the appropriate volume for the situation.
2. Sing songs and recite poems from memory.
3. Tell how things look, feel, sound, taste, and smell.
4. Answer questions accurately.
5. Ask questions to meet their needs.
6. Explain simple processes and activities.
7. Stay on the topic when telling information or talking to others.

STANDARD 3

The students will learn sound-symbol relationships and apply this skill to word recognition along with structural and sight analysis. While major emphasis is placed on decoding skills, literal and inferential comprehension is developed. (READING)

OBJECTIVES

1. Master left-to-right, top-to-bottom, and front-to-back orientation.
2. Master consonant sounds, blends, and digraphs in all positions in words.
3. Master short and long vowel sounds required by the district scope and sequence.
4. Recognize appropriate phonograms (word families).
5. Use structural analysis in order to read contractions, compound words, possessives, singular and plural forms of words, and multisyllable words on the students' level.
6. Master sight words and basal vocabulary required by the district scope and sequence.
7. Recognize word and sentence meaning in context.
8. Identify the meaning of antonyms and synonyms on their instructional level.
9. Discriminate between a statement and a question.
10. Recognize alphabetical order by first letter.

STANDARD 4

The students will respond to different kinds of stories and poetry that they read themselves or that is read to them. (LITERATURE)

OBJECTIVES

1. Read or listen to self-selected materials.
2. Retell sequence of events in stories they have read.

3. Tell which selections are real and which are make-believe.
4. Identify the main idea and supporting details in short selections.
5. Expand knowledge of poetry, stories, and books.

STANDARD 5	The students will develop skill in the correct spelling of words. (SPELLING)

OBJECTIVES

1. Develop visual and auditory memory of words.
2. Identify simple patterns need to spell words; e.g., CVC, CVCe.
3. Spell a basic first grade word list as designated by the school or district.
4. Write words and simple sentences from dictation.
5. Discriminate between correct and incorrect spelling of words on their level.
6. Understand meaning of assigned spelling words.

STANDARD 6	The students will print legibly and use these penmanship skills to record ideas and stories. (PENMANSHIP)

OBJECTIVES

1. Form manuscript letters and numbers legibly and correctly.
2. Space letters and words correctly on lines.
3. Write first and last name correctly.
4. Use capital letters at the beginning of sentences.
5. Proof and correct their own handwriting.

STANDARD 7	The students will be able to write simple ideas in complete sentences, using the proper punctuation. (WRITTEN COMPOSITION)

OBJECTIVES

1. State verbalized information in written form; e.g., riddles, short stories, and personal experiences.
2. Express complete thoughts in sentences.
3. Use capital letters, periods, and questions marks properly.
4. Proofread to identify and correct errors in capitalization and punctuation.

LEVEL 2

STANDARD 1	The students will attend to verbal information and translate what is heard into oral, written, physical, or artistic form. (LISTENING)

OBJECTIVES

1. Pay attention to the teacher or to others who are speaking or presenting without interrupting.
2. Follow two- and three- step directions after hearing them once.
3. Tell specific details of information, such as sequence of events.
4. Demonstrate comprehension of literary selections read aloud to them by drawing a picture, acting out the dialogue, writing a story.

STANDARD 2	The students will increase their spoken vocabulary as they verbally express ideas and opinions. (SPEAKING)

OBJECTIVES

1. Use vocabulary appropriate to the situation.
2. Recite second grade selections individually and as part of choral speaking.
3. Answer questions accurately and ask questions to gain needed information.
4. Contribute remarks related to topics being discussed.
5. Explain processes and activities and give sequential directions such as how to play a game or where to find the principal's office.
6. Recognize that differences in tone and pitch can affect language meaning.

STANDARD 3

The students will use phonetic, structural, and sight word recognition skills as they expand their reading vocabularies and increase comprehension of messages in print. (READING)

OBJECTIVES

1. Know sound-symbol relationships of consonants, blends, vowels, vowel variants, diphthongs, digraphs, and common phonograms.
2. Use structural analysis to pronounce contractions, compound words, possessives, singular and plural forms of words.
3. Identify suffixes and prefixes, and read multi-syllable words.
4. Read the sight words and basal vocabulary required by the district scope and sequence.
5. Know the meaning of antonyms, synonyms, homonyms, and multiple-meaning words at their instructional level.
6. Identify referent for most pronouns in context.
7. Recognize word and sentence meanings.
8. Discriminate between a statement, question, and an exclamatory sentence.
9. Read, understand, and follow written directions.
10. Alphabetize up to third letter.

STANDARD 4

The students will understand literal information and inferred meaning as they expand their reading interests. (LITERATURE)

OBJECTIVES

1. Read a variety of self-selected material.
2. Identify main ideas and note the supporting details.
3. Recall the sequence of events in a story.

4. Begin to compare characters, events, and settings.
5. Tell whether a selection is fantasy or if it could really have happened and why.
6. Respond creatively to poems, stories, and books; e.g., act out a favorite part, make a puppet, write a short book report.

STANDARD 5	The students will learn the correct spelling of words necessary to communicate in writing on their level. (SPELLING)

OBJECTIVES

1. Develop visual and auditory memory of words.
2. Make generalizations about common spelling patterns.
3. Spell the designated basic word list.
4. Write words and sentences with correct punctuation and capitalization from dictation.
5. Discriminate between correct and incorrect spelling of words on their level.
6. Show understanding of spelling words by being able to tell what they mean or by using them in a sentence.

STANDARD 6	The students will print legibly and efficiently when recording ideas and stories. (PENMANSHIP)

OBJECTIVES

1. Demonstrate correct formation and spacing of manuscript letters, words, and numbers.
2. Write name, address, and telephone number correctly.
3. Use capital letters and terminal punctuation correctly.
4. Proof and correct their own handwriting.

5. Demonstrate neatness in written work.

STANDARD 7	The students will compose sentences and paragraphs as they express ideas and information. (WRITTEN COMPOSITION)

OBJECTIVES

1. Write complete sentences.
2. Express complete thoughts in sentences and paragraphs.
3. Use capital letters, periods, questions marks, and exclamation marks properly.
4. Proofread to identify and correct mechanical errors.
5. Expand sentences by adding appropriate words and phrases.
6. Write a friendly letter using the standard form.
7. Write descriptive short stories and verse.

LEVEL 3

STANDARD 1

The students will attend to verbal information and show literal and inferential comprehension by the appropriate responses. (LISTENING)

OBJECTIVES

1. Pay attention to the teacher or to others who are speaking or presenting.
2. Follow three- and four-step directions correctly after hearing them once.
3. Tell major points or sequence of events.
4. Respond appropriately to speakers, e.g., ask questions and make contributions.
5. Show affective reactions to literary selections read aloud.

STANDARD 2

The students will verbally express ideas, opinions, and reactions to a variety of situations. (SPEAKING)

OBJECTIVES

1. Recite third grade selections clearly and fluently.
2. Express and support personal opinions about topics presented.
3. Make appropriate responses about opinions expressed by others.
4. Explain how to do something or tell about an event.
5. Answer questions accurately.
6. Ask appropriate questions when additional information is needed.
7. Participate in evaluation of ideas.

STANDARD 3	The students will demonstrate accuracy and efficiency in decoding words; increase their knowledge of word, sentence, and paragraph meaning; and begin to apply study skill reading to the content areas. (READING)

OBJECTIVES

1. Continue to build fluency in phonetic and structural analysis skills.
2. Identify the meaning of affixes and root (base) words.
3. Know the meaning of common homophones and homographs.
4. Attack multisyllable words systematically.
5. Read the sight words and basal vocabulary required by the district scope and sequence.
6. Understand word, sentence, and paragraph meanings in context.
7. Recognize guide words, entry words, and pronunciation keys.
8. Alphabetize to the fourth letter.
9. Read, understand, and follow written directions.
10. Interpret basic symbols on graphs, legends, maps, and charts.

STANDARD 4	The students will read fictional and non-fictional literature as well as increase their knowledge of children's classics. (LITERATURE)

OBJECTIVES

1. Read a variety of self-selected materials.
2. Retell storylines (plots) in the selections.
3. Predict logical conclusions to events in the selection.
4. Compare characters, events, plots, and settings.

5. Recognize cause and effect relationships as well as problem/solution situations.
6. Identify the difference in first and third person writing style.
7. Begin to understand the author's purpose; e.g., to inform, entertain, and convince.
8. Express reasons for their personal preferences to certain author's work or a particular area of interest.

STANDARD 5

The students will increase their spelling vocabularies in conjunction with their reading and writing experiences. (SPELLING)

OBJECTIVES

1. Increase visual and auditory memory of words.
2. Utilize major spelling generalizations; e.g., same vowel sound/different spellings.
3. Spell a basic word list designated by the district scope and sequence.
4. Write words, sentences, and paragraphs with correct punctuation and capitalization.
5. Discriminate between correct and incorrect spelling of words on level.
6. Spell homonyms and contractions correctly.
7. Show understanding of spelling words by using them in the proper context.

STANDARD 6

The students will maintain manuscript skills as well as learn to write cursive as they record ideas and stories. (PENMANSHIP)

OBJECTIVES

1. Use the correct formation of all upper and lower case letters and numbers in cursive.

2. Use proper strokes to join letters to form words.
3. Proof and correct their own handwriting.
4. Demonstrate neatness in written work, observing the correct format of margins, indentations, and spacing between words.

STANDARD 7	The students will compose more complex sentences and paragraphs and learn different formats of written composition. (WRITTEN COMPOSITION)

OBJECTIVES

1. Express thoughts in complete sentences, paragraphs, and stories.
2. Use capital letters, periods, question marks, exclamation mark, and quotation marks properly.
3. Proofread to identify and correct mechanical errors.
4. Revise and rearrange written materials for clarity and interest.
5. Recognize differences in the format of written composition (e.g., letters, poetry, articles, and stories).
6. Compose short factual reports.
7. Summarize and paraphrase written materials.
8. Write descriptive compositions.

LEVEL 4

STANDARD 1	The students will listen effectively at different levels of understanding by responding with appropriate words or actions. (LISTENING)

OBJECTIVES

1. Follow three- or four-step directions correctly after hearing them once.
2. Retell the story line (plot) of the narratives.
3. Identify relevant and irrelevant information from oral context.
4. Discriminate fact from opinion in a spoken presentation.
5. Draw conclusions from a speaker's message.
6. Determine a speaker's purpose by summarizing the main and supporting ideas.
7. Listen courteously to comments of others.

STANDARD 2	The students will verbally communicate ideas, information, opinions, descriptions, and feelings as they participate in conversations and discussions. (SPEAKING)

OBJECTIVES

1. Answer and ask questions coherently and concisely.
2. Use expressive speech to add meaning and interest to personal experiences.
3. Continue to develop and expand spoken vocabularies.
4. Select a topic of interest and focus on the subject for an adequate period of time.
5. Demonstrate various purposes for giving a speech such as to inform or entertain.

6. Memorize and recite facts, rules, poetry, and perform creative dramatics.
7. Contribute ideas effectively in group discussions.
8. Use appropriate language in various formal and informal situations.

STANDARD 3	The students will increase their reading vocabularies through structural and contextual clues and identify and strengthen comprehension techniques, particularly reading study skills. (READING)

OBJECTIVES

1. Review sound-symbol relationships and structural analysis, and apply these skills to word recognition.
2. Develop fluency in oral reading by using intonation and expression and by observing punctuation conventions.
3. Develop greater knowledge of word meanings through contextual clues.
4. Answer written and oral questions that require recall of facts.
5. Retell the story lines (plots) of the narratives.
6. Locate, identify, and summarize main ideas in written selections.
7. Predict a logical outcome of a reading selection.
8. Use books, people, and reference materials as resources for additional information.
9. Interpret symbols on graphs, legends, maps, charts, etc.
10. Identify fact and opinion elements in a written selection.
11. List the sequence of events in a reading selection.
12. Classify words and/or information found in the print.

STANDARD 4

The students will expand their knowledge of children's classics and noted authors while they increase the quality and quantity of self-selective reading. (LITERATURE)

OBJECTIVES

1. Differentiate between fictional and non-fictional narratives.
2. Comprehend first person and third person narratives.
3. Identify story elements: main characters, plots, and setting.
4. Predict what is being described and differentiate between visual and non-visual details.
5. State the intended meaning of figurative language.
6. Interpret various types of poetry for content and feelings.
7. Understand the literal and implied dialogue in plays.
8. Express personal reactions to the authors' work.

STANDARD 5

The students will correctly spell most words needed to express ideas and information and will become more proficient in cursive writing skills. (SPELLING AND PENMANSHIP)

OBJECTIVES

1. Recognize and correct misspelled words, using a dictionary when necessary.
2. Apply the patterns and rules that influence the spelling of words.
3. Master a basic spelling list designated by the district.
4. Practice writing sentences and paragraphs from dictation, observing capitalization and punctuation conventions.
5. Produce a legible cursive manuscript.
6. Increase rate of writing while maintaining neatness.

STANDARD 6	The students will develop skills in composing ideas with clarity, originality, and individual intent. (WRITTEN COMPOSITION)

OBJECTIVES

1. Begin to use specific, concrete nouns and verbs to convey information and feelings.
2. Discuss and demonstrate various purposes for writing.
3. Demonstrate imagination and description in writing.
4. Use complete sentences, avoiding run-ons, as well as expand basic or kernel sentences.
5. Use the appropriate capitalization and terminal punctuation.
6. Revise and rearrange written material for clarity and interest.
7. Proofread to identify and correct mechanical and usage errors.
8. Use various forms of writing: personal experience, first and third person narratives, friendly correspondence, descriptive prose, etc.

LEVEL 5

STANDARD 1

The students will develop critical and affective listening skills for understanding verbal messages. (LISTENING)

OBJECTIVES

1. Follow four- or five-step directions correctly after hearing them once.
2. Retell sequence of events or major points after a listening experience.
3. Draw conclusions from a speaker's message.
4. Determine a speaker's purpose by analyzing the content and presentation.
5. Listen courteously to comments of others.
6. Listen critically to distinguish that which is implied from that which is stated.

STANDARD 2

The students will continue to expand vocabulary and oral language skills as they participate in discussions and make verbal presentations to others. (SPEAKING)

OBJECTIVES

1. Recite or read a selection aloud using intonation and expression.
2. Ask questions to gain additional information.
3. Answer questions coherently and concisely.
4. Contribute appropriate ideas in group discussions.
5. Prepare and present a personal experience narrative or an informational message.
6. Use words, phrases, and sentences that are particularly descriptive rather than vague nouns, adjectives, and adverbs.

7. Organize the material so that the listeners get accurate impressions.
8. Memorize and recite poetry, short talks, and perform in plays.

STANDARD 3	The students will increase their efficiency in word recognition and acquire greater knowledge of word meaning. They will develop higher level comprehension skills, as well as apply study skills. (READING)

OBJECTIVES

1. Use phonetic and structural analysis, as well as contextual clues, to decode words accurately and fluently.
2. Demonstrate understanding of vocabulary by giving synonyms or antonyms, completing an analogy, or using words in sentences.
3. Answer correctly written or oral questions by paraphrasing major points, sequence of events, or classifying information.
4. Recognize cause and effect relationships accurately.
5. Differentiate between fact and opinion, fictional and non-fictional writing.
6. Predict logical outcomes or state a reasonable conclusion.
7. Identify the author's purpose for writing a selection.
8. Interpret graphs, maps, charts, etc.
9. Follow multiple-step written directions.

STANDARD 4	The students will read various types of literature and demonstrate their comprehension by both critical and creative responses. (LITERATURE)

OBJECTIVES

1. Recognize character traits, identify setting, and recall story line (plot).

2. Make valid inferences about details, events, and actions.
3. State the meaning of figurative language as it occurs in context.
4. Recognize first and third person narrative styles in poetry, short stories, or plays.
5. Continue to read a variety of self-selected material.
6. Participate in enrichment activities related to reading such as performing in a play, illustrating story setting or action, and comparing characters.

STANDARD 5

The students will use written language appropriately in formal and informal situations. (LANGUAGE USAGE)

OBJECTIVES

1. Write ideas in complete sentences, with correct capitalization and punctuation, including quotation marks and apostrophes.
2. Use the accepted format for the communication, e.g., spacing between words, paragraph indentation, and margins.
3. Use appropriate vocabulary and usage for the situation.
4. Spell words correctly needed to complete the task.
5. Revise and proofread and their own work.
6. Produce a legible, cursive manuscript.

STANDARD 6

The students will write first person narratives and directions as well as third person descriptive compositions. They will learn to take notes and summarize information. (WRITTEN COMPOSITION)

OBJECTIVES

1. Focus on a topic that is manageable.
2. Develop within the narrative a logical story line (plot).
3. Provide specific details to help create a realistic setting and/or a believable character.
4. Use details of size/shape, color/light, and other comparison/ contrasts elements so that the reader gains concrete impressions.
5. Organize the content of a story so it is coherent.
6. Define uncommon terms and use examples when appropriate.
7. Take notes from printed or verbal sources of information, e.g., a short lecture, a newspaper article, and a television program.

LEVEL 6

STANDARD 1	The students will develop listening skills for understanding first and third person narratives, descriptive prose, and informative messages. (LISTENING)

OBJECTIVES

1. Identify relevant and irrelevant information from an oral context.
2. Differentiate between personal experience and general information in first and third person narratives.
3. Identify bias, prejudice, or propaganda in oral presentations.
4. Take notes during a speaker's presentation.
5. Listen thoughtfully to comments of others before responding.

STANDARD 2	The students will expand spoken vocabularies and develop effective oral communication strategies. (SPEAKING)

OBJECTIVES

1. Communicate specific meanings and impressions through gestures, facial expressions, and tone of voice.
2. Demonstrate various techniques for giving a speech such as to inform, entertain, convince, or express emotions and feelings.
3. Contribute ideas effectively and appropriately in group discussions.
4. Use various audiovisual materials and equipment to improve a verbal presentation.
5. Follow simple and modified parliamentary procedure in meetings.
6. Critique and evaluate speeches presented by self and others.

STANDARD 3

The students will use printed information to keep current with relevant ideas, scientific facts, and historic events, as well as a source of recreation and entertainment. (READING)

OBJECTIVES

1. Use dictionaries and encyclopedias efficiently to answer questions about words, facts, people, etc.
2. Compare/contrast and classify information found in print.
3. Summarize the major points or sequence of events verbally and in writing.
4. Recognize the author's point of view, as well as evaluate their qualifications and expertise to write about the topic.
5. Identify the organizational style, e.g., format, sequence of events, and major topics.
6. Acquire the technical vocabulary needed to understand content on mastery level.
7. Summarize notes from more than one printed resource on the same topic.
8. Verify or discredit information by further study.
9. Adapt reading rate for different purposes, e.g., skimming a text and careful reading for difficult concepts.

STANDARD 4

The students will learn to recognize, compare, and evaluate literature and will develop their own personal preferences for certain stories and poems. (LITERATURE)

OBJECTIVES

1. Identify the mood or underlying theme in a story or poem.
2. Point out where imagery and exaggeration are used as techniques to enhance comprehension.
3. Compare and contrast literary works such as myths, legends, historical literature, biographies, science fiction, bound and unbound verse.

4. Interpret poetry for content and feelings.

5. Participate in enrichment activities, e.g., study the author's life, create a new setting or time frame, dramatize part of the story, and invent new characters.

6. Discuss and evaluate literary merits and personal reactions to particular books and stories.

STANDARD 5

The students will use the basic elements of sentence structure correctly, compose substantial paragraphs, and observe the standard conventions of contemporary English. (LANGUAGE USAGE)

OBJECTIVES

1. Punctuate correctly direct dialogue, subordinate clauses, and modifying phrases.

2. Spell correctly words added to the expressive vocabulary.

3. Use appropriate sentence structure and variety to convey thoughts and demonstrate relationships between ideas, e.g., simple sentences for major points.

4. Begin new paragraphs when the action, setting, or ideas change significantly.

5. Use correctly verbs, adverbs, adjectives, and pronouns that are commonly confused.

6. Produce a final draft in the acceptable written format.

STANDARD 6

The students will effectively compose informative messages as well as express themselves creatively in narrative, poetic, or editorial form. (WRITTEN COMPOSITION)

OBJECTIVES

1. Choose a manageable topic to write about.

2. Clearly state their opinion on a topic or event and support this opinion with examples.
3. Use figurative language and analogies when appropriate.
4. Synthesize and organize information from several sources.
5. Use "process" vocabulary and transition words effectively.
6. Write both bound and unbound verse.

FIELD TRIAL

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
English, Level 7	1.0	Mastery of Level 6

COURSE DESCRIPTION

This course continues the development of skills identified in the Preface. Students further improve their comprehending (reading and listening) and composing (writing and speaking).

Students will be introduced to a greater variety of literature, including the novel form, poetry, and drama. They continue to decode (read the lines), to infer (read between the lines), to interpret (read beyond the lines), and identify and appreciate effective use of language. They will improve their expressive and receptive vocabularies--that is the words they use in speaking and writing and the words they understand when reading and listening. They will be introduced to investigative and library reference skills

Students will continue to develop the listening process to become responsive listeners paraphrasing, using sequential dialogue, and summarizing in an open, trusting classroom atmosphere.

Students will have multiple opportunities to practice writing to increase fluency and to generate ideas, composing primarily to express meaning for specific audiences. They will write in the imaginative, descriptive, and informative modes, as well as be introduced to the persuasive mode. All phases of the writing process will be employed, where appropriate, to enhance meaning and communication for various audiences.

Oral composing will augment the written composing process. To develop skills and confidence in expressing meaning, students will speak in pairs, in small groups, and in class discussion.

LEVEL 7

THIRD PERSON DESCRIPTIONS OF ACTIONS

Comprehension:

STANDARD A-1	The students will comprehend third person descriptions of actions in oral or written language. (NOTE: Few, if any, written works are purely descriptions of actions. Thus, teachers will often need to use these descriptions out of context, or emphasize them in context to help students master this standard.)

OBJECTIVES

1. Describe what event is currently taking place.
2. Make accurate predictions about future actions.
3. Identify visual and non-visual details, such as texture/solidity.
4. Recall the sequence of events and tell how the action is organized chronologically.
5. Identify words, phrases, sentences that contribute greatly to the described action.
6. Add words to the receptive vocabulary necessary to complete the task.

Composition:

STANDARD A-2	The students will compose in written language vivid descriptions of actions by people and non-humans (e.g., animals, machinery, and the weather).

OBJECTIVES

1. Analyze the intended audience to determine what may be interesting to them.
2. Use concrete details, both visual and non-visual, describing the following:

shape/size	volume/pitch
color/light	fragrance/pungence
texture/solidity	speed/motion

3. Use a chronological method of organization--that is, first to last and last to first.
4. Use figurative language when appropriate; e.g., "John flew out the door."
5. Articulate a complete description so that readers can gain an accurate impression.
6. Use the entire composing process, from invention through final editing.
7. Add words to the expressive vocabulary necessary to complete the task.

Language

STANDARD A-3	The students will use oral and written language effectively and appropriately when composing descriptions of actions.

OBJECTIVES

1. Use specific nouns and action verbs. (NOTE: Students at this level of language development generally still rely on vague adverbs and adjectives to do the job better done by specific nouns and verbs, augmented by specific adjectives and adverbs; e.g., the sentence "The old man walked slowly down the street" might conjure up much different images than the more specific "The elderly gentleman shuffled down the street.")

2. Capitalize *all* proper nouns.

3. Recognize and avoid run-on sentences.

4. Avoid incomplete sentences (fragments).

5. Use embedded constructions, particularly relative clauses but some participial phrases also; e.g., "*Taking in the sights and sounds of an autumn afternoon*, two friends strolled down the street." (NOTE: Sentence combining is a very useful technique for helping students learn to use relative clauses and phrases--see Strong *Sentence Combining: A Composing Book, 2nd Edition*, Random House, 1982.)

6. Use appropriate punctuation of embedded clauses and phrases.

7. Spell correctly new words added to the expressive vocabulary.

8. Begin new paragraphs when the description shifts significantly to a different phase of action or to a different perspective.

9. Produce a legible cursive manuscript.

10. Produce a final draft that conforms to the standard conventions of contemporary English.

THIRD PERSON, PERSONAL EXPERIENCE NARRATIVES

Comprehension:

STANDARD B-1	The students will comprehend and make valid inferences from third person, personal experience narratives both in oral and written language. (NOTE: While narrative usually refers to fictional prose, the term is used here to denote any genre of writing that tells a story, including poetry, short stories, brief novels, and possibly some plays.)

OBJECTIVES

1. Develop fluency in oral readings of third person, personal experience narratives by using intonation and expression and by observing punctuation conventions.
2. Retell the storylines (plots) of the narratives.
3. Predict logical outcomes of the narratives.
4. State the author's purpose.
5. Adapt the reading rate to different difficulty levels in third person, personal experience narratives.
6. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD B-2	The students will compose coherent third person, personal experience narratives, first in prose, then poetry.

OBJECTIVES

1. Analyze the intended audience to determine what will be of interest.
2. Compose a coherent story (fluency). (Note: This objective is designed to get students to produce a substantial amount of written language.).
3. Develop within the narrative a logical storyline (plot).
4. Include sufficient specific visual and non-visual details to create a vivid setting.

5. Include sufficient specific visual and non-visual details to create character images and convey action clearly.

6. Include simple dialogue between at least two characters.

7. Use the entire composing process, from invention through final editing.

8. Add to the expressive vocabulary words necessary to complete the task.

Language:

STANDARD B-3	The students will use language effectively and appropriately when composing third person, personal experience narratives.

OBJECTIVES

1. Use specific concrete nouns and active concrete verbs.

2. Capitalize all proper nouns.

3. Avoid run-on's and sentence fragments.

4. Use homophones correctly, particularly its/it's, were/we're, and your/you're.

5. Make subjects and verbs agree in number.

6. Use specific concrete adjectives and adverbs.

7. Punctuate embedded constructions correctly; e.g., "Running a little late, John left quickly." or "John, who was already late, left quickly."

8. Punctuate coordinate constructions correctly; e.g., John got up, dressed quickly, and gulped a breakfast of fruit and cereal.

9. Punctuate dialogue used in the narratives correctly.

10. Begin new paragraphs when the action, subject matter, or setting significantly shifts and each time the speaker in a dialogue changes.

11. Spell correctly words added to the expressive vocabulary.

12. Produce a final draft that conforms to the standard conventions of contemporary English.

INFORMATIVE MESSAGES BASED ON WRITTEN SOURCES

Comprehension:

STANDARD C-1	The students will comprehend and make valid inferences from a variety of written sources on a chosen topic.

OBJECTIVES

1. Choose a focused topic to read about.
2. Use library reference skills to identify relevant materials.
3. Comprehend the main idea from each chosen source.
4. Differentiate between fact and opinion in each source.
5. State the author's purpose.
6. Adapt the reading rate appropriately for different levels of reading complexity in the sources.
7. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD C-2	The students will compose, both in written and oral language, informative messages based on a variety of written sources.

OBJECTIVES

1. Analyze the intended audience to determine what will be of interest.
2. Choose a focused, interesting topic.
3. Identify information from sources that relate to the chosen topic, paying particular attention to material that will be new and important to the author's audience (informative value).
4. Use note taking techniques to record information accurately.
5. Synthesize and organize important information logically.

6. Use the entire writing process, from invention through final editing.

7. Add words to the expressive vocabulary necessary to complete the tasks.

Language:

STANDARD C-3	The students will use language effectively and appropriately when composing informative messages based on written sources.

OBJECTIVES

1. Capitalize all proper nouns.

2. Avoid run-on's and sentence fragments.

3. Use the correct form of irregular verbs, especially "to be," "to see," and "to do."

4. Use appropriate sentence structure to convey ideas--that is, short and simple sentences for related information and complex sentences to demonstrate the relationship between informative points.

5. Use sentence variety to demonstrate the relationship among ideas and to improve readability.

6. Punctuate complex and compound sentences correctly.

7. Define jargon and other obscure vocabulary.

8. Begin new paragraphs when the subject matter significantly changes, sometimes indicated by the presence of a topic sentence but not always.

9. Spell correctly words added to the expressive vocabulary.

10. Produce a final draft that conforms to the standard conventions of contemporary English.

FIRST PERSON OPINION

Comprehension:

STANDARD D-1	The students will read and make valid inferences about author's/speaker's intentions from first person, opinion sources, including essay, poetry, "letters to the editor," and other types of persuasive communications.

OBJECTIVES

1. Comprehend the author's/speaker's main message.
2. Make valid inferences about the author's/speaker's intention.
3. Separate fact from opinion (factuality).
4. Identify apparent causes and effects.
5. Add to the receptive vocabulary words necessary to complete the tasks.

Composition:

STANDARD D-2	The students will compose first person opinions, both in written and oral language, that clearly reflect their beliefs.

OBJECTIVES

1. Choose a subject that the student has strong feelings about.
2. Analyze the intended audience to determine what they will likely think about the chosen subject.
3. State clearly what the opinion is.
4. Support the opinion with examples or facts.
5. Use figurative language when appropriate; e.g., "The straw that broke the camel's back was assigning homework over the holidays."
6. Use the entire composing process, from invention through final editing.
7. Add to the expressive vocabulary words necessary to complete the tasks.

Language:

STANDARD D-3

The students will use oral and written language effectively and appropriately when composing personal opinion messages.

OBJECTIVES

1. Use concrete nouns and action verbs.
2. Use complex and/or compound sentences to convey complex ideas; simple sentences for main points.
3. Punctuate embedded relative and adverbial clauses correctly, as well as participial phrases; e.g., "When the federal government first suggested this idea, many people didn't like it."
4. Begin a new paragraph each time there is a significant shift in the reasons for the opinion or the support for one of the reasons.
5. Spell correctly words added to the expressive vocabulary.
6. Produce a final draft that conforms to the standard conventions of contemporary English.

INFORMATIVE REQUEST

Comprehension:

STANDARD E-1

The students will comprehend requests for information and evaluate their ability to respond, then, if necessary, use additional sources to meet requests. (NOTE: At this level, the standard is probably best achieved by having students read requests from another class of students at the same level who may be in the same building or district. If this is not possible, requests from students at lower levels may suffice.)

OBJECTIVES

1. Identify the desired information.
2. Consider other sources of information that could be helpful in responding to the request.
3. Assess what the person making the request already knows about the subject.

4. Identify the main idea and supporting details from other sources.
5. Synthesize and organize the information from other sources.
6. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD E-2	The students will compose informative requests and responses to requests (two different activities).

OBJECTIVES (For Making Requests)

1. Analyze the intended audience.
2. State clearly what is being requested.
3. State clearly the reason for the request and provide appropriate evidence as to why the request should be met.
4. Use appropriate format (normally a letter).
5. Use the entire writing process, from invention through final editing.
6. Add to the receptive vocabulary words essential to complete the task.

OBJECTIVES (For responding to requests)

1. Analyze the intended audience.
2. State clearly whether the request is being met.
3. Organize and synthesize logically the requested information, using library or other non-personal sources if necessary.
4. Use the appropriate format (normally a letter).
5. Use the entire composing process, from invention through final editing.
6. Add to the receptive vocabulary words essential to complete the task.

Language:

STANDARD E-3	The students will use oral and written language effectively and appropriately when making or responding to informative requests.

OBJECTIVES

1. Use concrete nouns and the active verbs.
2. Avoid run-on's and sentence fragments.
3. Use sentence variety to provide rhythm and improve readability.
4. Punctuate complex and compound sentences correctly.
5. Use jargon-free language as much as possible.
6. Define new terms, using appositives whenever possible; e.g., "Composite-graphite materials, the same material used to make pencil leads, ..."
7. Punctuate appositives appropriately.
8. Begin a new paragraph when the information in the explanation or the reasons for the request significantly change or after introducing what is being requested or explained.
9. Spell correctly words added to the expressive vocabulary.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
English, Level 8	1.0	Mastery of Level 7

COURSE DESCRIPTION

This course continues the development of skills identified in the Preface. Students further improve their comprehending (reading and listening) and composing (writing and speaking).

Students will be introduced to a greater variety of literature, including the novel form, poetry, and drama. They continue to decode (read the lines), to infer (read between the lines), to interpret (read beyond the lines), and identify and appreciate effective use of language. They will improve their expressive and receptive vocabularies--that is the words they use in speaking and writing and the words they understand when reading and listening. They will be introduced to investigative and library reference skills.

Students will continue to develop the listening process to become responsive listeners--paraphrasing, using sequential dialogue, and summarizing in an open, trusting classroom atmosphere.

Students will have multiple opportunities to practice writing to increase fluency and to generate ideas, composing primarily to express meaning for specific audiences. They will write in the imaginative, descriptive, and informative modes, as well as being introduced to the persuasive mode. All phases of the writing process will be employed, where appropriate, to enhance meaning and communication for various audiences.

Oral composing will augment the written composing process to develop skill and confidence in expressing meaning. To develop skill and confidence in expressing meaning, students will speak in pairs, in small groups, and in class discussion.

LEVEL 8

THIRD PERSON DESCRIPTION BASED ON PERSONAL EXPERIENCE (CHARACTER SKETCH)

Comprehension:

STANDARD A-1	The students will make valid dominant impressions (e.g., the person is essentially good or bad) of characters from varied readings--stories, poems, plays. (Note: Few pieces of appropriate adolescent reading material are purely character sketches; however, many pieces are full of solid character descriptions.)

OBJECTIVES

1. Make valid inferences about characters from action.
2. Make valid inferences about characters from settings (contexts).
3. Make valid inferences about characters from dialogue.
4. Adapt reading rate for various purposes.
5. Explain how the development of a character(s) adds to the interpretation of reading material.
6. Add words to the receptive vocabulary necessary to complete the task.

Composition:

STANDARD A-2	The students will compose, both in oral and written language, character sketches of people they have known personally.

OBJECTIVES

1. Describe the character physically, relying on concrete, vivid details.
2. Describe character actions in detail, using graphic verbs which reveal the nature of the character; e.g., if students believe that the person they are describing is very good, they would want to describe sequences of action that depict this goodness, such as always tending to the sick and needy.
3. Relate important pieces of dialogue that demonstrate the character's true nature.
4. Use the entire composing process, from invention through final editing.
5. Add to the expressive vocabulary words essential to complete the tasks.

Language:

STANDARD A-3	The students will use language appropriately, both in oral and written language, when composing character sketches of people they have known.

OBJECTIVES

1. Use concrete nouns and action verbs.
2. Capitalize all proper nouns.
3. Recognize and avoid run-on sentences.
4. Use homophones correctly, particularly to, too, two; our, are; there, their, they're.
5. Use irregular verbs correctly, particularly the forms of "to lie," "to lay," "to sit," and "to set."
6. Use participial phrases (e.g., "Blowing in the wind, the flag struck patriotism in the hearts of the people") to achieve detailed descriptions of character settings and actions and to achieve sentence variety.
7. Punctuate participial phrases correctly. (NOTE: Sentence combining is a very useful technique for helping students learn to use and punctuate descriptive participial phrases--see Strong, Sentence Combining: A Composing Book; 2nd Edition, Random House, 1982.)
8. Punctuate and paragraph dialogue correctly. (Remember: In dialogue, the writer must begin a new paragraph each time the speaker changes.)
9. Apart from dialogue, begin a new paragraph each time the action, setting, or time significantly changes.
10. Spell correctly words added to the expressive vocabulary.
11. Produce final drafts that conform to the standard conventions of contemporary English.

THIRD PERSON, NON-PERSONAL EXPERIENCE NARRATIVES (FICTION OR NON-FICTION)

Comprehension:

STANDARD B-1	The students will comprehend and make valid inferences from third person, non-personal experience narratives. (Includes poems and plays, as well as prose.)

OBJECTIVES

1. Develop fluency in oral readings of third person, non-personal experience narratives by using intonation and expression and by observing punctuation conventions.

2. Predict the most logical outcome of the narratives.

3. Identify common themes; e.g., people against the elements, good versus evil.

4. Differentiate important details from unimportant ones.

5. Add words to the receptive vocabulary necessary to complete the task.

Composition

STANDARD B-2	The students will compose, both in oral and written language, coherent third person, non-personal experience narratives.

OBJECTIVES

1. Develop a logical story line (plot)--that is, in the beginning, everything is possible; in the middle, few things are probable; in the end, everything is necessary.

2. Develop believable characters, using descriptions of people and their actions, as well as authentic dialogue.

   Include ample, specific visual details.
   Include ample, specific non-visual details.

3. Develop simplistic themes; e.g., people against the elements, good versus evil.

4. Use the entire composing process, from invention through final editing.

5. Add to the expressive vocabulary words necessary to complete the task.

Language:

STANDARD B-3	The students will use language effectively and appropriately when composing third person, non-personal experience narratives.

OBJECTIVES

1. Use concrete nouns and active verbs.
2. Avoid run-on sentences and sentence fragments.
3. Use homophones correctly, particularly "affect and effect," "here and hear," "no and know," "do and due," "bear and bare," and "so, sew, and sow."
4. Use irregular verbs correctly, particularly "to bring", "to break", "to burst."
5. Use adjectives and adverbs correctly, particularly good and well.
6. Make subjects and verbs agree in number, especially when there is a compound subject or the words "each," "all," "either," "everyone," or "everything" serve as the subject.
7. Use participial phrases (e.g., "Drained and dried from too much sun, the young boy fell asleep quickly") to achieve detailed and believable characters.
8. Punctuate participial phrases correctly.
9. Begin new paragraphs each time the action, setting, or idea significantly changes.
10. Spell correctly words added to the expressive vocabulary.
11. Produce final drafts that conform to the standard conventions of contemporary English.

INFORMATIVE REPORT

Comprehension:

STANDARD C-1	The students will comprehend and make valid inferences from a variety of written secondary sources.

OBJECTIVES

1. Choose a focused topic to read about.
2. Use library reference skills to identify relevant source materials--subject cards and some author cards.
3. Comprehend the main ideas from each chosen selection.
4. Differentiate between fact and opinion.

5. Differentiate between cause and effect, effect and cause.
6. State the author's literal purpose.
7. Make valid interpretations of charts, graphs, diagrams, et cetera.
8. Adapt reading rate appropriately for different levels of reading complexity in the sources.
9. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD C-2	The students will compose, both in oral and written language, informative messages based on a variety of secondary sources. (Interviews should be encouraged as a research source).

OBJECTIVES

1. Choose a manageable topic to write about.
2. After locating and reading or interviewing potential sources, use note taking techniques to record pertinent information.
3. Identify information from the sources that will be new and important to the intended audience.
4. Synthesize and organize important information logically.
5. Include a table of contents and a reference list.
6. Use the entire writing process, from invention through final editing.
7. Add words to the expressive vocabulary necessary to complete the tasks.

Language:

STANDARD C-3	The students will use language effectively and appropriately when composing informative reports.

OBJECTIVES

1. Use appropriate sentence structure to convey ideas--that is, short and simple sentences for major points, compound sentences for equivalently related information, and complex (or compound/complex sentences) for the relationship between informative points; e.g., cause to effect, "Because of a four degree rise in the temperature of El Nino, anchovy fishing off the cost of Peru greatly decreased."

2. Combine sentences when they share the same subject (or verb) and do not present major new ideas; e.g., "The American automobile industry manufactures a variety of vehicles. These include compact, mid-size, and luxury cars" could be rewritten as. . ." a variety of vehicles, including compact, . . ."

3. Avoid redundancy; e.g., "The first, best reason is . . . " should be "The best reason is . . ."

4. Use sentence variety to demonstrate the relationship among ideas and to improve readability.

5. Punctuate complex and compound sentences correctly.

6. Define jargon and other obscure vocabulary.

   Use single sentence definitions when appropriate. (NOTE: Extended definitions are usually only necessary if the subject material is very complex, far above what students at this level would generally be comfortable with.)

   Use appositives when appropriate.

7. Use a logical system of organization--that is, either general to specific (deductive) or specific to general (inductive).

8. Begin new paragraphs when the subject matter significantly changes.

9. Spell correctly words added to the expressive vocabulary.

10. Produce final drafts that conform to the standard conventions of contemporary English.

THIRD PERSON OPINION

Comprehension:

STANDARD D-1	The students will comprehend and make valid inferences about author's/speaker's intention from third person, opinion sources, such as essays, fiction, poems, and advertising.

OBJECTIVES

1. Comprehend the author/speaker's main idea.
2. Make valid inferences about the author's/speaker's intention.
3. Separate fact from opinion (factuality).
4. Identify in written and visual works the common propaganda techniques of:

   Band wagon--e.g., "Join the Pepsi generation."

   Card stacking--e.g., "Four out of every five doctors recommend ..."

   Transfer--e.g., Eat Wheaties and be just like the athletes in the commercials.
5. Locate apparent causes and effects and evaluate their validity; "Ring-around-the-collar" is exclusively caused by using the wrong detergent.

Composition:

STANDARD D-2	The students will compose third person opinions that effectively portray their beliefs.

OBJECTIVES

1. Choose a subject that the student is knowledgeable about or is willing to become knowledgeable about. (NOTE: It is important that the students realize the necessity of being well informed on a subject before conveying their opinions, even from the third person point of view.)
2. State clearly what the opinion is.
3. Support the opinion with examples, facts, or other evidence.

4. Use the entire composing process, from invention through final editing.

5. Add to the expressive vocabulary words necessary to complete the task.

Language:

STANDARD D-3	The students will use language effectively and appropriately when composing third person opinion messages.

OBJECTIVES

1. Use concrete nouns and action verbs.

2. Use quotation marks correctly; e.g., The mayor said, "What are we going to do?" or in the mayor's essay "The Importance of Saving Tax Dollars . . ."

3. Make sure subjects and verbs agree in number, particularly when the compound subject is connected by "or," "neither/nor;" e.g., "Neither Mark nor Steve plays tennis."

4. Make sure separate verbs in complex sentences logically agree; e.g., "Before Jane passes the class, she will have to turn in her final project."

5. Vary sentence structure--simple sentences for main ideas, compound sentences for related ideas, and complex ones to demonstrate the relationship between ideas.

6. Punctuate correctly compound, complex, and compound/complex sentences.

7. Begin a new paragraph each time there is a significant shift in the reasons for the opinion or the support for one of the reasons.

8. Spell correctly words added to the expressive vocabulary.

9. Produce a final draft that conforms to the standard conventions of contemporary English.

"HOW TO"

Comprehension:

STANDARD E-1	The students will successfully follow written and/or oral multiple-step, multiple-sequence directions. (NOTE: The best analogy might be a recipe that requires cooks to follow multiple-steps to bake a cake (one sequence) then requires them to follow multiple-steps to make icing for the cake (another sequence). This is a very common, very pragmatic, lifetime language skill. However, teachers will have to look beyond texts--e.g., recipe books, repair manuals, assembly instructions etc.--to find materials for the students to read.)

OBJECTIVES

1. Determine the author's purpose. (Produce a final product; e.g., "a kite"; explain a procedure; e.g.,"how to change a tire.")
2. Identify the approximate sequence of activities.
3. Comprehend charts, graphs, and diagrams when information is presented in a non-prose format.
4. Complete all steps in the process in the proper order.
5. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD E-2	The students will compose in writing and/or oral language a multiple-step, multiple-sequence of "how to do" something.

OBJECTIVES

1. Research until the process is understood fully by the author.
2. Develop clear, logical sequences.
3. Develop clear, logical steps within each sequence.
4. Differentiate between major sequences and steps.
5. Use charts, graphs, and diagrams to convey information in a visual, non-prose format when appropriate.

6. Compose subject matter at the appropriate level of audience understanding.

7. Use the entire composing process, from invention through final editing.

8. Produce a final draft that conforms to the standard conventions of contemporary English.

Language:

STANDARD E-3	The students will use language effectively and appropriately when composing multiple-step, multiple-sequence "how to" messages.

OBJECTIVES

1. Use clear and specific language that can be understood by the intended audience:

   Use concrete, specific nouns.
   Use action verbs.
   Use simple sentences as much as possible. (NOTE: We fully realize that most directions rely on imperative statements with understood verbs; e.g., "Do not pass go." However, at this stage of language development, we feel students should be composing full sentences.)

2. Combine sentences to form coordinate sequences of action; e.g., "Separate the egg yolks and whites, beat each separately, then add the egg whites to the batter."

3. Use comparative and superlative adjectives and adverbs correctly; e.g., "The more cautious of the two men . . ." or "The most cautious of the three men. . ."

4. Use the appropriate organizing scheme--that is, chronological, process, spatial, et cetera.

5. Make transitions smooth, and non-repetitious.

6. Use appropriate punctuation.

7. Spell correctly words added to the expressive vocabulary.

LANGUAGE ARTS, Level 7 -- Drama Unit

UNIT DESCRIPTION

The standards and objectives that follow should be integrated into the Level 7 Language Arts Curriculum, not taught separately. Some of the drama standards and objectives have already been presented in the language arts curriculum. They are repeated here to identify them as drama standards and objectives as well. They are to be mastered once not twice.

STANDARD 1	The students will use sensory and emotional awareness to express perceptions of the world. (Participant)

OBJECTIVES

1. Identify, interpret, and create imagery poetry or prose:
    a. Isolate the vocabulary that carries the sensory image.
    b. Interpret the author's meaning in a sensory passage of poetry or prose.
    c. Write a poem using sensory imagery.
2. Describe the emotional state of a character in a given selection of poetry or prose.

STANDARD 2	The students will develop interpersonal relationships. (Participant)

OBJECTIVES

1. Show respect for the ideas and comments of peers by listening attentively and by offering criticism in a positive way:
    a. Stress pros first.
    b. Give helpful suggestions second.

STANDARD 3

The students will continue to develop vocal and physical expression skills. (Participant)

OBJECTIVES

1. Listen and adjust to peers in choral speech exercises to achieve unity of pace, pitch, and inflection.
2. Synchronize body movements in a group pantomime of a poem or of a portion of a story.
3. Use hands expressively to convey weight, size, and shape while moving an imaginary object to a new location.
4. Memorize and recite a given literary selection:
   a. Demonstrate a good vocal range
   b. Speak with appropriate expression.

STANDARD 4

The students will continue to develop an understanding of dramatic structure. (Observer/Listener, Critic)

OBJECTIVES

1. Improvise a new ending or a new solution to a problem within a story or novel.
2. Analyze a character from a literary selection.
   a. Identify moods, behaviors, and motivations.
   b. Represent that character in a role-play of a scene.

STANDARD 5	The students will begin to analyze dramatic productions. (Observer/Listener, Critic)

OBJECTIVE

1. Identify what criteria should be used to evaluate the sets, plots, and acting in various television productions.

STANDARD 6	The students will design simple costumes for a dramatic production. (Participant, Critic)

OBJECTIVES

1. Design a costume for a character.

LANGUAGE ARTS, Level 8 -- Drama Unit

UNIT DESCRIPTION

The standards and objectives that follow should be integrated into the Level 8 Language Arts Curriculum, not taught separately. Some of the drama standards and objectives have already been presented in the language arts curriculum. They are repeated here to identify them as drama standards and objectives as well. They are to be mastered once, not twice.

STANDARD 1	The students will continue to use discover sensory and emotional awareness to express perceptions of the world. (Participant)

OBJECTIVES

1. Role play a character from a given poetry or prose selection.

STANDARD 2	The students will continue to develop interpersonal relationships. (Participant)

OBJECTIVES

1. Continue to show respect for the ideas and comments of peers by listening attentively and by offering criticisms in a positive way:
    a. Stress pros first.
    b. Give helpful suggestions second.
2. Establish work standards for rehearsal and presentation and abide by those standards.

STANDARD 3	The students will continue to develop vocal and physical expression skills. (Participant)

OBJECTIVES

1. Create and present a reader's theatre developed from prose or poetry.
2. Demonstrate varied vocal expressions and actions appropriate to a character.
3. Project a character in a radio drama.
4. Develop a pantomime expressing the meaning of a new vocabulary word.
5. Develop the dialogue between a reporter and the person being interviewed.

STANDARD 4	The students will continue to develop an understanding of dramatic structure. (Observer/Listener, Critic)

OBJECTIVES

1. Demonstrate knowledge of dramatic elements (i.e., plot, character, setting, climax, mood) by:
    a. Describing how a film or a stage production handles each element.
    b. Writing and recording a radio drama based on a narrative poem, story, historical event, or a portion of a novel.
3. Write a dramatic play.

STANDARD 5	The students will continue to analyze dramatic productions. (Observer/Listener, Critic)

OBJECTIVE

1. Explain why some criteria for evaluating the sets, plots, and acting in dramatic productions (stage, film, television) are more important than others.

STANDARD 6	The students will design sets for a dramatic production. (Participant, Critic)

OBJECTIVE

1. Design a set for one scene or a play using artwork or magazine pictures mounted on paper.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
English, Level 9	1.0	Mastery of Level 8

COURSE DESCRIPTION

This course continues the development of skills identified in the Preface. Students further improve their comprehending (reading and listening) and composing (writing and speaking).

Students will be introduced to a greater variety of literature, including poetry and drama. They continue to decode (read the lines), to infer (read between the lines), to interpret (read beyond the lines), and to identify and appreciate effective use of language. They will improve their expressive and receptive vocabularies--that is, the words they use in speaking and writing and those they understand when reading and listening. Students will further develop investigative and library reference skills.

Students will continue to develop the listening process to become responsive listeners-paraphrasing, using sequential dialogue, and summarizing in an open, trusting classroom atmosphere.

Students will have multiple opportunities to practice writing to increase fluency and to generate ideas, composing primarily to express meaning for specific audiences. They will write in the imaginative, descriptive, informative, and persuasive modes. All phases of the writing process will be employed, where appropriate, to enhance meaning and communication for various audiences.

Oral composing will augment the written composing process. To develop skill and confidence in expressing meaning, students will speak pairs, in small groups, and in class discussion.

THIRD PERSON, NON-PERSONAL EXPERIENCE DESCRIPTIONS

Comprehension:

STANDARD A-1	The students will make valid inferences gain a valid (dominant impression) of what is being described in a variety of descriptive selections. (NOTE: Few, selections are purely descriptive. However, many, including scientific ones, are packed with description--this is particularly true of narratives. Thus the reading standard can be met by using materials which contain a significant degree of description.)

OBJECTIVES

1. Make valid inferences about settings from concrete details.

2. Make valid inferences about characters from concrete details.

3. Make valid inferences about incidents from concrete details.

4. Determine which narrative element (setting, characterizations, plot) contributes most to the reader's dominant impression.

5. Recognize descriptive elements.

6. Recognize descriptive strategies.

7. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD A-2	The students will write descriptive texts that give readers a clear dominant impression of where they are and what they are looking at.

OBJECTIVES

1. Use concrete details, both visual and non-visual, to describe the following:

   shape/size
   color/light
   spatial relations
     within the scene.

   texture/solidity
   volume/pitch
   sweet/sour
   pungent/fragrant

2. Organize details so that the mind's eye easily follows along.

   Use panorama, when appropriate, in which writers stand still in one place and describe what they see.

   Use tour, when appropriate, in which writers move physically from place to place within a scene and describe what they see at each stopping point.

   Use association, when appropriate, in which writers recall visual details as they present themselves from memory of a scene.

3. Use abstract details--emotional reactions, unique experiences--only when they directly contribute to a dominant impression of the description in the reader's mind.

4. Use the entire writing process, from invention through final editing.

5. Add to the expressive vocabulary words essential to complete the tasks.

Language:

STANDARD A-3	The students will use descriptive language appropriately and effectively when composing descriptive manuscripts.

OBJECTIVES

1. State the difference between concrete, universally recognized details and idiosyncratic ones; e.g., "Suffering from years of neglect, the road was pockmarked like the surface of the moon," versus, "The road was like the road in front of my house."

2. Use nominative and subjective case pronouns correctly; e.g., "Between you and me . . ."

3. Use the three common methods for organizing detail (tour, panorama, association).

4. Embed detail in sentences using phrases and some clauses; e.g., "Little by little, Mary pushed forward, her thighs and calves already fatigued by the previous 25 miles."

5. Make phrases and clauses parallel; e.g., "The girl, sitting on the bench to wait for her bus, looked nervous" versus, "The girl, sitting on the bench, waiting for her bus, looked nervous."
6. Punctuate clauses and phrases correctly.

7. Begin a new paragraph each time the action, time, person, or setting significantly changes.

8. Spell correctly words added to the expressive vocabulary.

9. Produce a final draft that conforms to the standard conventions of contemporary English.

FIRST PERSON, PERSONAL EXPERIENCE NARRATIVE
(SINGLE EVENT)

(NOTE: The purpose of this group of standards is mastery of comprehension and composing skills necessary to understand and communicate a single event--the event may be a hunting or shopping trip, a vacation, a football game, whatever. An additional standard is devoted at this level to the mastery of skills necessary to understand and communicate a series of events, a skill typically associated with autobiography.)

Comprehension:

STANDARD B-1	The students will read and interpret first person, personal experiences narratives of a single event. (NOTE: Single event, first person, personal experience narratives seldom occur by themselves; instead, they are usually part of a larger works such as autobiographies. Several good and appropriate examples can be found in works such as Maya Angelou's Why the Caged Bird Sings, Russell Baker's Growing Up, or personal journals.)

OBJECTIVES

1. Make valid inferences about characters based on method of characterization--dialogue, description, etc.
2. Pinpoint stereotypes in characterization, if any.
3. Describe time and place.
4. Paraphrase the setting.
5. Evaluate the advantage of first or third person point of view.
6. Identify simplistic themes; e.g., people versus nature.
7. Identify the conflict (point of contention).
8. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD B-2	The students will compose a first person, personal experience narrative of a single event.

OBJECTIVES

1. Develop a conflict within the narrative, i.e., within the author, between the author and others, or between the author and nature, fate, et cetra:

   Describe the action.

   Develop dialogue that demonstrates the conflict and characterizations.

2. Develop a specific setting:

   Describe sights, sounds, smells, and "feels" of the setting with details so that the reader experiences the place as the author has done.

3. Show self and other important characters realistically:

   Describe actions, appearances, and dialogue so that a dominant impression is created of each important character.

4. Develop simplistic themes; e.g., people versus nature.

5. Use the entire writing process, from invention through final editing.

6. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD B-3	The students will use language appropriately and effectively when writing a first person, personal experience narrative.

OBJECTIVES

1. Use vivid, concrete language when describing setting, characters, and action.

2. Use "problem" pronouns correctly, particularly "who/whom" and "who's/whose".

3. Punctuate and paragraph dialogue correctly.

4. Vary sentence patterns to achieve rhythm and improve readability.

5. Use appropriate coordinate structures to convey action--e.g., "John got up, dressed, and rushed out the door."

6. Punctuate coordinate structures correctly.
7. Spell correctly words added to the expressive vocabulary.
8. Produce a final draft that conforms to the standard conventions of contemporary English.

PERSUASION

Comprehension:

STANDARD C-1	The students will comprehend and infer from persuasive materials.

OBJECTIVES

1. Identify the main issue.
2. Recognize supporting evidence.
3. Identify the author's purpose.
4. Differentiate between fact and opinion (factuality).
5. Recognize emotional statements.
6. Evaluate the validity of sources--that is, who is a more qualified source on farm prices, a farmer or a railroad engineer?
7. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD C-2	The students will defend a position, orally or in writing, and support it effectively.

OBJECTIVES

1. Identify an issue.
2. Take a stand on the issue
3. Analyze the intended audience.
4. Choose an appropriate voice (tone).
5. Use a consistent voice throughout.

6. Support the stand with factual or logical evidence.

7. Identify the major counter argument.

8. Offer evidence to refute the counter argument.

9. Use the entire writing process, from invention through final editing.

10. Add to the expressive vocabulary words essential to complete the tasks.

Language:

STANDARD C-3	The students will use language effectively and appropriately when composing persuasive works to persuade an audience to action.

OBJECTIVES

1. Use vivid, concise language when composing persuasively:

   Differentiate between connotation and denotation; e.g., "cool" as an adjective of temperature, vis-a-vis "cool" as an adjective of personality.

   Use simple emotionally charged language.

2. Use examples to support assertions (inductive logic).

3. Begin a new paragraph each time an assertion with accompanying support is made.
4. Spell correctly words added to the expressive vocabulary.

5. Produce a final draft that conforms to the standard conventions of contemporary English.

INFORMATIVE REPORT

Comprehension:

STANDARD D-1	The students will comprehend and make valid inferences from a variety of written secondary sources.

OBJECTIVES

1. Choose a manageable topic to research.
2. Use library reference skills to identify relevant source materials--subject cards, author cards, vertical files, et cetera.
3. Comprehend and infer main idea from each source.
4. Differentiate between fact and opinion.
5. Assess informative value of the sources: Does the information present much that would be new and interesting to the intended audience?
6. State the author's literal and inferential purposes.
7. Adapt the reading rate appropriately for different levels of complexity in the sources.
8. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD D-2	The students will compose a report based on a variety of secondary sources.

OBJECTIVES

1. Choose a manageable topic.
2. Analyze the intended audience.
3. Choose an appropriate voice (tone).
4. Use a consistent voice throughout the report.
5. After locating and reading potential sources, use note taking techniques to record pertinent information.
6. Identify information from sources that would be new and important to the intended audience (informative value).
7. Synthesize important material.
8. Describe how the report relates to the general subject area--"the value of solar energy in meeting future energy needs" as compared with "future energy needs in general" (comprehensiveness).

9. Include a table of contents and an appropriate reference list.

10. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD D-3	The students will use language appropriately and effectively when writing an informative report.

OBJECTIVES

1. Use appropriate sentence structure to convey ideas--that is, short, simple sentences for major points, compound sentences for equivalently related information, and complex (or compound/complex sentences) for the relationship between informative points; e.g., "Because the weather in the mountains changes drastically, hikers should carry a variety of clothing."

2. Use sentence variety to demonstrate the relationship among ideas and to improve readability.

3. Use homophones correctly, particularly:

   principal/principle
   capitol/capital
   foreword/forward
   further/farther
   advice/advise

4. Punctuate complex and compound sentences correctly.

5. Use accurately a consistent reference style.

6. Define jargon and other obscure vocabulary.

7. Spell correctly words added to the expressive vocabulary.

8. Produce a final draft that conforms to the standard conventions of contemporary English.

FIRST PERSON, PERSONAL EXPERIENCE NARRATIVE
(SERIES OF EVENTS)

[NOTE: This group of standards builds on the first person, personal experience, single event standard presented earlier at this level. While the focus of the first group of standards was to build narrative skills (reading, writing, and language) associated with a single event, this group of standards concentrates on the skills associated with the a series of events, such as a partial autobiography.]

Comprehension:

STANDARD E-1	The students will comprehend and make valid inferences from first person, personal experience narratives--series of events.

OBJECTIVES

1. Make valid inferences about characters based on methods of characterization--dialogue, description, etc.
2. Pinpoint stereotypes in characterization.
3. Describe time and place.
4. Paraphrase the setting.
5. Evaluate the advantage of first or third person point of view.
6. Explain the theme.
7. Identify the conflict.
8. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD E-2	The students will compose a first person, personal experience narrative of a series of events, which taken together have significant meaning for the student. (NOTE: The focus of this standard is not to produce a full-blown autobiography, but a partial autobiography of a period in the student's life.)

OBJECTIVES

1. Develop a conflict within the narrative; i.e., within the author, between the author and others, or between the author and nature, fate, et cetera:

   Describe the action.

   Develop dialogue that demonstrates the conflict and so that the narrative leaves the author and audience with insight into the experience.

2. Develop specific settings:

   Describe sights, sounds, smells, and "feels" of the setting with enough details so that the reader experience the places as the author has done.

3. Show self and other important characters realistically:

   Describe actions and appearances so that a dominant impression is created of each important character.

4. Develop simplistic themes; e.g., people versus nature.

5. Use the entire writing process, from invention through final editing.

6. Add to the expressive vocabulary words necessary to complete the task.

Language:

STANDARD E-3	The students will use language effectively and appropriately when composing first person, personal experience narratives of a series of events.

OBJECTIVES

1. Use vivid, concrete language when describing setting, characters, and action.

2. Punctuate and paragraph dialogue correctly.

3. Punctuate possessives correctly; e.g., "Today's work is finished."

4. Vary sentence patterns to achieve rhythm and improve readability.

5. Use appropriate coordinate and subordinate structures (phrases and clauses) to convey necessary details of characterization, action, and setting; e.g., "Tired from a full day's work (subordinate), he went directly home, fixed dinner for the kids, did the dishes, and stayed up until 1:00 a.m. ironing shirts (coordinate).

6. Punctuate coordinate and subordinate structures correctly.

7. Spell correctly words added to the expressive vocabulary.

8. Produce a final draft that conforms to the standard conventions of contemporary English.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
English, Level 10	1.0	Mastery of Level 9

COURSE DESCRIPTION

This course continues the development of skills identified in the Preface. Students further improve their levels of comprehending (reading and listening) and composing (writing and speaking).

The students will read literature in a variety of forms, fiction and non-fiction, including poetry and drama. They continue to decode (read the lines), to infer (read between the lines), and to interpret (read beyond the lines), thereby learning to appreciate effective use of language. They will improve their expressive and receptive vocabularies--that is, the words they use in speaking and writing and the words they understand when reading and listening. They will expand their investigative and reference skills.

Students will develop the listening process to become responsive listeners--paraphrasing, using sequential dialogue, and summarizing in an open, trusting classroom atmosphere.

Students will have many opportunities to practice writing to increase fluency and to generate ideas, composing primarily to express meaning for specific audiences. They will write in imaginative, descriptive, informative, and persuasive modes. All phases of the writing process will be employed, where appropriate, to enhance meaning and communication for various audiences.

Oral composing will augment the written composing process to develop skill and confidence in expressing meaning. To develop skill and confidence in expressing meaning, students will speak in pairs, in small groups, in class discussions, and possibly to a larger audience.

FIRST PERSON, NON-PERSONAL EXPERIENCE NARRATIVE

Comprehension:

STANDARD A-1	The students will read and infer meaning in various forms of narrative.

OBJECTIVES

1. Identify point of view in narrative. Recognize first and third person.
2. Make valid inferences about characters, plot, and setting.
3. Identify mood or tone of a selection from examples.
4. Identify author's purpose in a selection (theme).
5. Identify the conflict.
6. Identify the resolution of the conflict.
7. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD A-2	The students will write a narrative, focusing on a logical sequence of events and resolution from the first person point of view.

OBJECTIVES

1. Develop a coherent plot, following a logic of probabilities--in the beginning, all things are possible; near the middle, few things are probable; in the end, everything is necessary.

   Develop some form of conflict in the story.

   Resolve the conflict.

2. Develop a specific setting:

   Use sensory imagery so readers will know the setting as the author knows it.

3. Build "true-to-life" characters that contribute heavily to the development of theme in the narrative:

    Describe the physical attributes of the characters, using enough detail so they become real to the reader.

    Use dialogue to enhance character personality.

4. After analyzing the intended audience, choose an appropriate voice and use it consistently.

5. Develop a strong theme in the story; e.g., equality of the sexes, people versus nature.

6. Use the entire writing process, from invention through final editing.

7. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD A-3	The students will use effective, appropriate language when writing a first person, non-personal experience narrative.

OBJECTIVES

1. Use vivid, descriptive language and rich vocabulary that affects all five senses, including figurative language when appropriate.

2. Use a variety of sentence structure to produce rhythm and aid comprehension.

3. Punctuate correctly complex sentences, particularly elipses; e.g., "It was the company, not the food, that made the evening."

4. Begin a new paragraph every time the action, setting, or time significantly changes; also each time the speaker in dialogue changes.

5. Include dialogue as part of character development:

    Punctuate the dialogue correctly.

    Use appropriate capitalization in dialogue.

    Use dialogue that accurately reflects each character's personality.

3. Determine the purpose for composing (Explain a procedure? Produce a final product?).
4. Compose subject matter at the level of audience understanding.
5. Develop logical, clear sequences.
6. Develop logical, clear steps within each sequence.
7. Form an introduction to capture audience interest.
8. Differentiate between major steps and sequences.
9. Conclude with a strong summary statement.
10. Use charts, graphs, and diagrams to convey information in a non-prose format when appropriate.
11. Use the entire composing process, either in writing or speech.
12. Add to the expressive vocabulary words necessary to complete the task.

Language:

STANDARD B-3	The students will use language effectively and appropriately when composing process papers.

OBJECTIVES

1. Use clear, specific language that can be understood by the intended audience:

    Use imperative statements with understood subjects when conveying directions; e.g., "Do not pass go."

    Use action verbs.

    Use simple sentences as much as possible.

2. Use the appropriate organizing scheme--e.g., chronological, process, and spatial.
3. Make transitions smooth and non-repetitious.
4. Use semicolons correctly to separate phrases or clauses containing commas.
5. Use punctuation as a means to achieve clarity.
6. Make use of the best organizing (e.g., headings) and visual display techniques (e.g., bullets and white space) to improve comprehension.

7. Spell correctly words added to the expressive vocabulary.
8. Produce final drafts that are as readable as possible. (Remember: If directions can be misunderstood, they will be.)

INFORMATIVE REPORT

Comprehension:

STANDARD C-1	The students will read and infer correctly from informative texts.

OBJECTIVES

1. Comprehend the main idea.
2. Determine the degree of factuality of the sources; e.g., the validity of sources, the validity of statistics, the appropriateness of the logics used. (NOTE: This objective can be used as the basis for an intensive study of propaganda and advertising.)
3. Determine the informative value of the sources; i.e., Do the sources present any information that is new or relevant to the readers?
4. Assess the degree of comprehensiveness; i.e., Is the information presented out of context, possibly misleading the reader?
5. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD C-2	The students will develop from a variety of sources a report that answers a question; e.g., "What are the effects of acid rain?"

OBJECTIVES

1. Choose a focused topic.
2. Research the topic.
3. Analyze the audience to determine what information would be new and relevant to them (informative value).

4. Choose and use consistently an appropriate voice.

5. Relate the report to the larger contexts (comprehensiveness); e.g., effects of of acid rain to acid rain in general, acid rain to pollution in general.

6. Paraphrase accurately.

7. Cite and reference all sources accurately using a consistent style. (NOTE: Teachers may want to remind students that plagiarism is a crime.)

8. Use only information that has a high degree of factuality-- verifiable either through logic, data, or the reputation of the source.

9. Recognize and use the appropriate style of development for informative reports; e.g., cause to effect, effect to cause, general to specific, specific to general, and so forth.

10. Use the entire writing process, from invention through final editing.

11. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD C-3	The students will use effective and appropriate language when composing informative reports.

OBJECTIVES

1. Use little jargon, except when absolutely necessary; when it is necessary, definitions are immediately included:

   Use appositives when appropriate for definitions of terms.

2. Abstain from exclamatory and imperative sentences.

3. Emphasize simple syntax, fewer embedded phrases and clauses; e.g., "There is a second philosophical principle, developed by Ernst Mach before the turn of this century, that lends to the expectation that the force of gravity is weakening," as compared with "Just before 1900, Ernst Mach proposed another reason why the force of gravity is weakening."

4. Use precise distinctions, often requiring multiple modifiers if used judiciously; e.g., "high-level nuclear waste" versus "nuclear waste."

5. Use denotative language instead of connotative terms, except when examples or analogies are necessary.
6. Emphasize brevity and conciseness.
7. Use semicolons correctly to separate clearly related independent clauses.
8. Spell correctly words added to the expressive vocabulary.
9. Produce a final draft that conforms to the standard conventions of contemporary English.

CHARACTER SKETCH

Comprehension:

STANDARD D-1	The students will make valid dominant impressions of characters from varied readings (stories, poems, plays).

OBJECTIVES

1. Make valid inferences about characters from dialogue.
2. Make valid inferences about characters from action.
3. Make valid inferences about characters from settings (contexts).
4. Identify character stereotypes; e.g., all women are highly emotional or all men are unemotional.
5. Identify important theme(s).
6. Relate the character(s) to the important theme(s).
7. Discriminate important character details from unimportant ones.
8. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD D-2	The students will compose a cogent character sketch.

OBJECTIVES

1. Identify or create a character worth writing about.
2. After analyzing the intended audience, choose an appropriate voice.
3. Describe the character physically, relying on concrete, vivid details.
4. Describe the important character actions.
5. Develop the character using description of setting and actions to establish a context.
6. Develop the character using authentic dialogue.
7. Use a logic of probabilities--at the beginning, all things are possible; near the middle, few things are probable; at the end, everything is necessary.
8. Develop unity; i.e., all components of the sketch, including bits of action, dialogue and setting, directly contribute to the reader's dominant impression of the character.
9. Use the entire writing process, from invention through final editing.
10. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD D-3	The students will use language effectively and appropriately when writing a character sketch.

OBJECTIVES

1. Punctuate and paragraph dialogue correctly.
2. Recognize and use repetition in dialogue when appropriate.
3. Recognize and use non-grammatical language in dialogue when appropriate; e.g., the "good/well" and the "who/whom" choices could be used to illustrate character traits. (NOTE: This objective could also be effectively used in the parallel reading standard.)
4. Recognize and use original and local expressions and emphasis in dialogue when appropriate (dialectology).

5. Make all coordinate phrases and clauses parallel; e.g., "My favorite pastimes are playing the piano and reading science fiction."

6. Spell correctly words added to the expressive vocabulary.

7. Produce a final draft that conforms to the standard conventions of contemporary English.

NON-LIBRARY RESEARCH REPORT

Comprehension:

STANDARD E-1	The students will summarize accurately responses to surveys, interviews, and many other non-library sources of information.

OBJECTIVES

1. Comprehend main ideas from non-library sources.

2. Select important ideas from interviews.

3. Select important ideas from surveys and other non-library sources.

4. Add to the receptive vocabulary words essential to complete the task.

(NOTE: While the objectives for Standard C-1 at this level have already been met, it is necessary that they also be met here in a different context in order to master Standard E-1.)

Composition:

STANDARD E-2	The students will effectively present information gathered from non-library research.

OBJECTIVES

1. Identify non-library sources (surveys, interviews, personal letters, journals, TV/radio reports, bulletins, newsletters, film, etc.).

2. Prepare for gathering information from various non-library sources:

Practice interviewing techniques, particularly note taking and preparing interview questions.

Practice survey techniques, particularly question formulation.

Practice formal requests.

3. Gather information from various non-library sources.
4. Prepare the information for an effective written or oral report.
5. Use the entire composing process.
6. Add to the expressive vocabulary words necessary to complete the task.

(NOTE: While the objectives for Standard C-2 at this level have already been met, it is necessary that they also be met here in a different context in order to master Standard E-2.)

Language:

STANDARD E-3	The students will use effective and appropriate language when reporting research from non-library sources.

OBJECTIVES

1. Use little jargon, except when it is absolutely necessary; when it is necessary, definitions are immediately included:

   Use appositives when appropriate for definitions of terms.

2. Abstain from exclamatory and imperative sentences.
3. Emphasize simple syntax, fewer embedded phrases and clauses. (See Objective 3, Standard C-3 at this level.)
4. Use precise distinctions, often requiring multiple modifiers if used judiciously. (See Objective 4, Standard C-3 at this level.)
5. Use denotative language instead of connotative, except when examples or analogies are necessary.
6. Emphasize brevity and conciseness.
7. Avoid redundancy; e.g., "It is his personal opinion . . ." versus- "It is his opinion . . ."
8. Spell correctly words added to the expressive vocabulary.

9. Produce final drafts that conform to the standard conventions of contemporary English.

PERSUASIVE ESSAY--IMMEDIATE EXPERIENCE

[NOTE: This group of standards develops skills necessary to evaluate and compose effectively persuasive materials relevant to students' immediate experience (e.g., whether the school year should be lengthened), not materials relevant to general concerns (e.g., whether foreign aid should be increased).]

Comprehension:

STANDARD F-1	The students will identify persuasive techniques and evaluate persuasive subject matter.

OBJECTIVES

1. Paraphrase the purpose of persuasive material.
2. Identify the author's point of view.
3. Discriminate facts from opinions.
4. Identify the use of emotional appeal (pathos); e.g., "No red-blooded American would ever let some politician take his guns away from him."
5. Identify the use of ethical appeal (ethos); e.g., "I know how you feel since I have the same values that you do."
6. Identify the use of faulty logical appeals (logos); e.g., "If the med-fly is infesting California, it won't be long before it reaches us."
7. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD F-2	The students will compose an essay, taking a stand on an issue relevant to their immediate experience and then supporting their position while refuting the major counter argument.

OBJECTIVES

1. Choose an appropriate issue.
2. Take a stand on that issue and determine a purpose for composing.
3. Offer support for the position, using one or a combination of pathetic, ethical, or logical appeals. (See Objectives 4, 5, and 6, Standard F-1 at this level.)
4. Analyze the intended audience and choose an appropriate voice.
5. Offer evidence to refute the major counter argument.
6. Use the entire writing process, from invention through final editing.
7. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD F-3	The students will use language effectively and and appropriately to sway the audience to the intended action.

OBJECTIVES

1. Use connotative language effectively.
2. Use superlative nouns and adjectives effectively.
3. Make appropriate use of imperative sentences.
4. Use appropriate organizational strategies.
5. Use appropriate persuasive strategies (i.e., pathetic, ethical, logical, or any combination of the three).
6. Spell correctly words added to the expressive vocabulary.
7. Produce a final draft that conforms to the standard conventions of contemporary English.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
English, Level 11	1.0	Mastery of Level 10

COURSE DESCRIPTION

This course continues the development of skills identified in the preface. Students further improve their comprehending (reading and listening) and composing (writing and speaking).

Students will read literature in a variety of forms, fiction and non-fiction, including poetry and drama. They continue to decode (read the lines), to infer (read between the lines), and to interpret (read beyond the lines), thereby learning to appreciate effective use of language. They will improve their expressive and receptive vocabularies--that is, the words they use in speaking and writing and the words they understand when reading and listening. They will improve their investigative and reference skills.

Students will develop and practice various listening techniques in order to become sensitive, responsible, and critical listeners. They will practice visualization, following directions, note taking, and dictation.

Students will compose primarily to express meaning for specific audiences. They will practice imaginative/narrative, descriptive/ sensory, practical/informative and the persuasive/argumentative modes of writing. Students will practice writing to increase fluency and to generate ideas. All phases of the writing process will be employed, where appropriate, to enhance meaning and communication for various audiences.

Oral composing will augment the written composing process. To develop skill and confidence in expressing meaning, students will speak in pairs, in small groups, in class discussion and possibly for larger audiences.

All activities in the language arts core are designed to help the students know more about themselves, their environment, and their relationship with others. The skills enhance the students' development in becoming thinking, communicating individuals.

THIRD PERSON, NON-PERSONAL EXPERIENCE NARRATIVE

Comprehension:

STANDARD A-1	The students will read and make valid inferences from third person, non-personal experience literature.

OBJECTIVES

1. Interpret meaning when it is not directly stated.

    Make valid inferences about characters, real or imaginary, based on various methods of characterization.

    Make valid inferences about time and place.

    Make valid inferences about past and present action.

2. Identify the mood or emotional tone of a selection.

3. Identify the point of view from which a selection is presented when it is implied.

4. Identify topic by examining details.

5. Identify and evaluate the effects of common stereotypes.

6. Identify important themes.

7. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD A-2	The students will write a coherent and cogent non-personal experience narrative from the third person point of view.

OBJECTIVES

1. Analyze the intended audience to determine an appropriate purpose.

2. Choose an appropriate voice.

3. Develop a specific setting for the narrative by describing the sights, sounds, smells, and "feels" of the place with enough detail to create an image so that readers know the setting as the author knows it.

4. Develop "believable" characters by describing the physical characteristics of the people in the story in enough detail so that they lend themselves toward a "dominate impression" of each person; e.g., "Collar buttoned, belt cinched, enfolding pleats in polyester pants two sizes too large, he reached for one of the four pens (three of which did not work) in his plastic pocket protector," to portray a socially awkward boy.

5. Develop a conflict in the story; e.g., between characters, between a character and nature or fate or society, et cetera:

   Describe specific action in the narrative that is in harmony with the conflict and the characterizations (see Objective 2).

   Develop dialogue (sometimes monologue) that lends itself directly to the development of the conflict and the characterizations (see Objective 2).

   Resolve the conflict so that narrative leaves the audience with some insight.

6. Develop an important theme(s) throughout; e.g., the inescapability of fate.

7. Use the entire writing process, from invention through final editing.

8. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD A-3	The students will use language effectively and appropriately when writing third person, non-personal experience narratives.

OBJECTIVES

1. Use vivid, concrete language when describing setting, characters, and action.

2. Use effective style when articulating necessary narrative detail:

   Use appropriate coordinate and subordinate structures (phrases and clauses). (See Objective 4, Standard A-2 at this level for an example of coordinate and subordinate structures used to convey important narrative detail.)

   Punctuate coordinate and subordinate structures correctly .

3. Use dialogue/monologue appropriately:

   Punctuate dialogue/monologue correctly.

   Begin new paragraphs as speakers change in dialogue and ideas change in monologue.

   Use vivid description in dialogue (e.g., Hesitant and taut, she finally blurted out"...")

4. Spell correctly words added to the expressive vocabulary.

5. Produce a final draft that conforms to the standard conventions of contemporary English.

PERSUASIVE ESSAY

[NOTE: This group of standards develops skills necessary to evaluate and to compose effectively persuasive materials that are of importance to the students but not directly related to their immediate experience--e.g., "The Merits of Foreign Aid" as opposed to "The Length of the School Year."]

Comprehension:

STANDARD B-1	The students will read persuasive materials and evaluate them.

OBJECTIVES

1. Make valid inferences concerning fact and opinion.

2. Interpret the purpose of the persuasive material:

   Determine intended audience.

   Determine intended result.

3. Make valid inferences concerning the effectiveness and the appropriateness of the types of appeals used (ethical, logical, emotional; see Objectives 4, 5, and 6, Standard F-1, at level 10).

4. Make valid inferences concerning clouding of the issues, such as the use of faulty dilemma, begging the question, et cetera.

5. Add to the receptive vocabulary words essential to complete the task.

Composition:

STANDARD B-2	The students will write and/or speak to persuade an audience to action.

OBJECTIVE

1. Select a controversial issue.
2. Identify the intended audience.
3. Analyze the audience carefully.
4. Determine what the audience must be persuaded to do.
5. Introduce the subject and make clear the objective of the essay or speech (if necessary).
6. Determine and list major arguments of the issue.
7. Choose an argument to defend.
8. Develop support for that argument, using ethical, emotional, logical, or an combination of the three strategies. (See Objectives 4, 5, and 6, Standard F-1 at level 10).
9. Select strongest opposing argument.
10. Develop refutation.
11. Use the most appropriate organization strategy, depending on the nature of the intended audience--that is, present the argument first if the audience is sympathetic; the refutation first if the audience is hostile.
12. Use the entire composing process, from invention through final editing.
13. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD B-3	The students will use language effectively and appropriately when composing persuasive works.

OBJECTIVES

1. Use effective connotative and denotative language.
2. Use superlative nouns and adjectives when appropriate.
3. Use imperative sentences when appropriate.
4. Use the appropriate organizational structure, depending on the predicted receptivity of the audience (hostile or warm).
5. Use the most effective logical approach (if needed).
6. Use an appropriate combination of argumentative strategies: ethical, pathetic, logical.
7. Use varied sentence structure to foster audience interest and improve readability.
8. Use paragraphing consistent with overall structure.
9. Spell correctly words added to the expressive vocabulary.
10. Produce a final draft that conforms to the standard conventions of contemporary English.

INTERPRETATIVE ESSAY

Comprehension:

STANDARD C-1	The students will evaluate works in standard Level 11 literature anthologies (or supplemental equivalent works).

OBJECTIVES

1. Select a work for evaluation such as a poem, play, short story, novel, or work of non-fiction.
2. Identify major and minor themes.

    Make valid inferences about the effectiveness of these ideas or purposes to the reader and to the work.

    Evaluate the validity of these ideas or purposes.

    Evaluate the applicability of these ideas or purposes to today's society.

Composition:

STANDARD D-2	The students will develop an annotated bibliography, citing a variety of sources on a chosen issue to continue development of research skills.

OBJECTIVES

1. Identify an issue to research and write.
2. Analyze the intended audience and choose an appropriate purpose for composing; e.g., will the research present new and relevant information to the intended audience?
3. Choose and maintain an appropriate voice.
4. Take careful notes from print and non-print sources to aid in the writing of summaries of each.
5. Organize notes to compose each summary into a meaningful, informative source.
6. Write a coherent summary from the notes for each source chosen, focusing on the main idea(s).
7. Compile each summary into an annotated bibliography using proper form.
8. Use the entire writing process, from invention through final editing.
9. Add to the expressive vocabulary words essential to complete the task.

Language:

STANDARD D-3	The students will use language effectively and appropriately when writing an annotated bibliography.

OBJECTIVES

1. Use proper note-taking skills to allow for accurate and informative summaries.
2. Use an appropriate research format accurately and consistently.
3. Use precise language to encourage brevity and exactness in the summaries of articles.

4. Spell correctly words added to the expressive vocabulary.
5. Produce a final draft that conforms to the standard conventions of contemporary English.

JOB APPLICATION LETTER/RESUME

Comprehension:

STANDARD E-1	The students will read and make valid inferences about job announcements, materials describing what various occupations are like, and predictions about future occupations.

OBJECTIVES

1. Locate sources of job information, including current listings, and occupational descriptions and projections.
2. Match personal interests with existing occupations.
3. Match personal interests with projected occupations.
4. Identify personal qualifications, current or projected, for existing and future occupations.
5. Make valid projections about the availability of jobs in a variety of occupations.
6. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD E-2	The students will compose effective job application letters and resumes. (NOTE: Because of the extreme advantages they offer in mastering this standard, students are encouraged to use word processors.)

OBJECTIVES

1. Choose a listed job to apply for.
2. Analyze the intended audience to determine what personal qualifications they desire.
3. Match personal qualifications with the desired qualifications.

4. Construct a highly persuasive, authentic job application letter and resume'. (See Standard B-2 at this level.)

5. Use the entire writing process, from invention through final editing.

6. Add to the expressive vocabulary words necessary to complete the task.

Language:

STANDARD E-3	The students will use language effectively and appropriately when writing job application letters and resume's.

OBJECTIVES

1. Use clear, concise language.

2. Use a highly persuasive organizational strategy (usually based on logical and ethical appeals) in both the letter and resume'.

3. Use clear, visually attractive formats:

    Make good use of white space.

    Make effective use of headings.

4. Make sure there are NO errors in the standard conventions of contemporary English.

PROPOSAL

Comprehension:

STANDARD F-1	The students will read and make valid inferences from a variety of written sources to identify one of the following three types of research problems: (1) Lack of a theory to explain some phenomenon; e.g., "Why did the dinosaurs suddenly become extinct?" (2) Lack of evidence to support an existing theory; e.g., "What evidence exists to support the theory that aspirin prevents heart attacks?" (3) Lack of consensus among existing evidence or experts to support one theory over another; e.g., "Does capital punishment really deter capital crimes?"

OBJECTIVES

1. Choose a general research area, such as the extinction of dinosaurs.

2. Read from a variety of sources to determine if a researchable problem exists--that is, a lack of a theory, a lack of supporting evidence, or a lack of consensus among experts or evidence.

3. Identify which one of three types of research problems it is.

4. Compile evidence to support the existence of the research problem.

5. Use note-taking techniques to record and summarize information that supports the existence of the research problem.

6. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD F-2	The students will compose a proposal clearly indicating and supporting the existence of a researchable problem presented in standard F-1.

OBJECTIVES

1. Analyze the intended audience.

2. Provide an introduction to the problem, usually by providing a chronological history of it.

3. Muster sufficient evidence to support the existence of a research problem.

4. Organize appropriately evidence supporting existence of the problem; e.g., comparison/contrast or general to specific.

5. State exactly what the research problem is and which one of the three types it is.

6. Conclude by stating what research is necessary to solve the problem--i.e., "A researcher (student) may resolve the lack of consensus by reviewing the pertinent information in the school library."

7. Use the entire writing process, from invention through final editing.

8. Add words to the expressive vocabulary necessary to complete the task.

Language:

STANDARD F-3	The students will use language effectively and appropriately when composing a research proposal.

OBJECTIVES

1. Use clear, concise language:
   - Use action verbs.
   - Use actual subjects (e.g., "Smith believed..." instead of "It was concluded that..."
   - Avoid meaningless phrases and transitions (e.g., "It should be noted that...")
2. Punctuate appropriately.
3. Paragraph appropriately.
4. Use accurately and consistently a recognized reference and citation style; e.g., Turabian.
5. Spell correctly words added to the expressive vocabulary.
6. Produce a final draft that conforms to the standard conventions of contemporary English.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
English, Level 12 (Elective--College Prep.)	1.0	Mastery of Level 11

COURSE DESCRIPTION

Although this course is NOT part of the core requirements, it is included here because it is a sequential extension of the core curriculum for college bound students. With about 70 percent of our students continuing on with some form of post-secondary education, this suggested course provides a core sequence of studies for the students.

The course continues the development of skills identified in the Preface. Students further improve their comprehending (reading and listening) and composing (writing and speaking).

Students will read literature in a variety of forms, fiction and non-fiction. They continue to decode (read the lines), to infer (read between the lines), and to interpret (read beyond the lines), thereby learning to appreciate effective use of language. They will improve their expressive and receptive vocabularies and will improve their investigative and reference skills.

Students will develop and practice various listening techniques in order to become sensitive, responsible, and critical listeners. They will practice visualization, following directions, note taking, and dictation.

Students will compose primarily to express meaning for specific audiences. They will practice imaginative/narrative, descriptive/ sensory, practical/informative and the persuasive/argumentative modes of writing. Students will have the opportunity to practice writing to increase fluency and to generate ideas. All phases of the writing process will be employed, where appropriate, to enhance meaning and communication for various audiences.

Oral composing will augment the written composing process. To develop skill and confidence in expressing meaning, students will speak to each other in pairs, in small groups, class discussion and possibly for larger audiences.

All activities in the language arts core are designed to help the students know more about themselves, their environment, and their relationship with others. The skills enhance the students' development in becoming thinking, communicating individuals.

THIRD PERSON, NON-PERSONAL EXPERIENCE NARRATIVE

[NOTE: This group of standards fosters literary comprehension and composing skills over a wide range of literature, including drama and poetry.]

Comprehension:

STANDARD A-1	The students will read and make valid inferences from third person, non-personal experience literature.

OBJECTIVES

1. Make valid inferences about characters, real or imaginary, based on various methods of characterization.
2. Identify stereotypes.
3. Identify characters that do, indeed, exhibit growth or decline.
4. Explain character evaluations.
5. Identify mood or emotional tone.
6. Evaluate validity of mood.
7. Identify major and minor themes.
8. Support the identification of those themes.
9. Evaluate the validity of those themes.
10. Add to the receptive vocabulary words necessary to meet the tasks.

Composition:

STANDARD A-2	The students will compose coherent, cogent third-person, non-personal experience narratives in a variety of genres, including poetry and possibly drama.

OBJECTIVES

1. Develop realistic settings.
2. Develop non-stereotypical characters.

3. Develop significant themes.

4. Use major literary devices when appropriate; e.g., symbolism.

5. Use the entire writing process, from invention through final editing.

6. Add words to the expressive vocabulary necessary to complete the task.

Language:

STANDARD A-3	The students will use language effectively and appropriately when composing third person, non-personal experience narratives.

OBJECTIVES

1. Use vivid, concrete language when describing settings, characters, and actions.

2. Use effective figurative language when appropriate.

3. Punctuate to enhance meaning. (NOTE: This is commonly known as poetic license.)

4. Use connotative and denotative language to enhance meaning.

5. Spell correctly words added to the impressive vocabulary.

6. Produce final drafts that conform to the standard conventions of contemporary English.

EXECUTIVE SUMMARY

(NOTE: Executive summaries are very common in today's world; e.g., "newsbreaks," news magazines, letter to the file, et cetera.)

Comprehension:

STANDARD B-1	The students will read and make valid inferences from an informative report.

OBJECTIVES

1. Identify and articulate the purpose of the report.
2. Identify essential specifics in the report; e.g., names, costs, places, dates, et cetera essential to understanding fully the entire report.
3. Identify words that enumerate; e.g., first, second, next, finally.
4. Identify words that express causation; e.g., accordingly, as a result, because, consequently, therefore, and thus.
5. Identify words that express contrasts and comparisons; e.g., although, despite, furthermore, in addition, and not only.
6. Identify words that signal essentials; e.g., basically, foremost, fundamental, leading, and major.
7. Identify and articulate the conclusions or results (data).
8. Identify and articulate the recommendations or implications--that is, what are they, when they can be carried out, why they are necessary.
9. Add to the receptive vocabulary new words necessary to complete this task.

   (NOTE: Little, if any, text material exists to support this standard. However, much material is available in magazines, television, radio, newspapers, the business community, and sometimes in the school system.)

Composition:

STANDARD B-2

The students will compose, both in written and oral language, executive summaries that accurately summarize a complete informative report.
(NOTE: As was also the case with Standard B-1 at this level, teachers will probably have to look beyond textbooks for reports to summarize.)

OBJECTIVES

1. State the purpose of the report in one sentence.
2. Include all essential information.

Delete all examples and explanations, sometimes signaled by: as noted in, as shown by, for example, such as, for instance.

Delete all opinions or inconclusive findings (including those of the summary's author), sometimes signaled by: I feel, I admit, questionable, suggests, subject to change, might possibly show.

3. Summarize conclusions or results (data). Use charts or graphs when appropriate.

4. Summarize recommendations or implications.

5. Identify, usually in the title, what is being summarized.

6. Use the entire composing process, from invention through final editing.

7. Add to the expressive vocabulary words necessary to complete the task.

Language:

STANDARD B-3	The students will use concise and appropriate language when composing their executive summaries.

OBJECTIVES

1. Use concise language.

   Use human subjects and active verbs whenever possible; e.g., "The scientists concluded a change in climate led to the extinction of dinosaurs." instead of "The evidence suggests that a change in climate led to the extinction of dinosaurs."

   Avoid meaningless introductions; e.g., "It should be noted that..."

   Avoid compound verbs; e.g., "The conclusion is ..." instead of " The conclusion appears to be ..."

2. Use simple, highly readable sentence structure.

3. Avoid all jargon.

4. Define briefly all technical terms.

5. Spell correctly words added to the expressive vocabulary.

6. Produce final drafts that conform to the standard conventions of contemporary English.

PROPOSAL

[NOTE: This group of standards is designed to be the first step in a three-step research process. The other two steps are contained in the "Analysis Paper" and "Solution Paper" groups of standards.]

Comprehension:

STANDARD C-1	The students will read and make valid inferences from a variety of written sources to identify one of the following three types of research problems: (1) Lack of a theory to explain some phenomenon; e.g., "How should high-level nuclear waste be disposed of?" (2) Lack of evidence to support an existing theory; e.g., "What evidence is there to prove that shooting high-level nuclear waste into the sun is the best method of disposal?" (3) Lack of consensus about two or more existing theories; e.g., "How do we know whether shooting high-level nuclear waste into the sun or ocean dumping of it is the best method of disposal?"

OBJECTIVES

1. Choose a general research area; e.g., disposal of high-level nuclear waste.
2. Read from a variety of sources to determine if a researchable problem exists.
3. Identify which one of the three types of research problems the problem is.
4. Compile evidence to support existence of the problem.

    Evaluate the factuality of the evidences: Can it be verified?

    Evaluate the informative value of the evidence: Is the evidence commonly known or relatively undiscovered?

    Evaluate the comprehensiveness of the evidence: Is the evidence a product of unique circumstances or does it generally apply?

5. Use note-taking skills to record and summarize the evidence.

6. Add to the receptive vocabulary new words necessary to complete the task.

Composition:

STANDARD C-2	The students will compose cogent proposals, clearly identifying and supporting the existence of a researchable problem.

OBJECTIVES

1. Identify and analyze the intended audience.
2. Provide an introduction to the problem, typically by providing a chronological history of the problem.
3. Muster sufficient evidence to support the existence of the problem.
4. Use the appropriate organizational strategy to present the supporting evidence; e.g., comparison/contrast, general to specific, and specific to general.
5. State exactly what the research problem is and what type of problem it is.
6. End by including a research plan to find a solution to the problem.
7. Use the entire writing process, from invention through final editing.
8. Add to the expressive vocabulary words necessary to solve the problem.

Language:

STANDARD C-3	The students will use language effectively and appropriately when composing problem statements.

OBJECTIVES

1. Use concise language:

   Use "real" subjects of sentences whenever possible; e.g., "The scientists reported that ..." instead of "It was reported that ..."

Avoid "strings" of prepositional phrases; e.g., "He believes shooting high-level nuclear waste into the sun is not a good idea." instead of "The disposal of high-level nuclear waste by shooting it into the sun is not a good idea."

Avoid compound verbs; e.g., "It is ..." instead of "It appears to be ..."

Use action verbs.

2. Use clear language. Avoid jargon as much as possible. Define all necessary jargon and technical language.
3. Punctuate appropriately.
4. Paragraph appropriately.
5. Use consistently and accurately a recognized reference and citation style.
6. Spell correctly words added to the expressive vocabulary.
7. Produce final drafts that conform to the standard conventions of contemporary English.

ANALYSIS PAPER

Comprehension:

STANDARD D-1	The students will read and make valid inferences from a variety of sources on a controversial issue for the purpose of determining, then ranking criteria that can be used to evaluate potential solutions to that issue. (For example, if the general topic happened to be disposal of nuclear waste, the purpose of the analysis paper is to identify important criteria for judging solutions to this problem--such as longevity of the solution, cost, environmental hazards, et cetera--then ranking these criteria in order of their importance.)

OBJECTIVES

1. Select a controversial issue. (Review Standards F-1 through F-3 at Level 11.)
2. Identify and locate sources dealing with the issue (pro and con).
3. Identify and/or infer criteria the authors of the source materials based their opinions on.

4. Select the most important criteria based on:

   Factuality -- Can the criterion be met by citing facts or data?

   Informative value -- Does the criterion call for information that is new and important?

   Comprehensiveness -- Does the criterion apply to all aspects of the issue or does it apply to only a unique instance of the issue (out of context)?

5. List the criteria that initially seemed important but after careful analysis faltered.

6. Add words to the expressive vocabulary necessary to complete the task.

Composition:

STANDARD D-2	The students will compose, possibly in both written and oral language, clear, cogent analysis reports. (NOTE: Models for analysis reports can best be found in editorials or essays published in newspapers or magazines.)

OBJECTIVES

1. Select and research a controversial issue.

2. Select important criteria for evaluating solutions to the problem. (See Standard C-1 at this level).

3. State clearly important criteria and then those criteria which seemed initially important but proved not to be later. (See Standard C-1. at this level.)

4. Explain the importance of each criterion; e.g., concerning the issue of nuclear waste disposal, longevity of any solution might be an important criterion because quick, cost-effective solutions may turn out to be very expensive in the long run if they are only effective for a short period of time.

5. Describe in some detail how potential solutions must meet each criterion in order to be considered the best solution; e.g., if issue is nuclear waste disposal and the important criteria are effectiveness, potential environmental impact, longevity, and cost, the best solution must indeed solve the problem, not produce any severe environmental damages, last a long time, and be affordable.

6. Use the entire composing process, from invention through final editing.

7. Add to the expressive vocabulary words necessary to complete the task.

Language:

STANDARD D-3	The students will use language effectively and appropriately when composing analysis reports.

OBJECTIVES

1. Use concise language:

   Use "real" subjects of sentences whenever possible; e.g., "The EPA decided that ..."

   Avoid "strings" of prepositional phrases; e.g., "Nuclear waste disposal is an extremely controversial topic" instead of "One of the most controversial topics of our time is nuclear waste disposal."

   Avoid compound verbs; e.g., "It is ..." instead of "It appears to be ..."

   Use action verbs.

2. Use clear language.

   Avoid jargon as much as possible.

   Define all necessary jargon and technical language.

3. Punctuate appropriately.

4. Paragraph appropriately.

5. Use consistently and accurately a recognized reference and citation style.

6. Spell correctly words added to the expressive vocabulary.

7. Produce a final draft that conforms to the standard conventions of contemporary English.

SOLUTION PAPER

[NOTE: This group of standards is directly predicated on mastery of the standards for the Analysis Paper. Teachers may choose to approach this group of standards right after the mastery of the Analysis Paper or may delay the third group of standards for a while.]

Comprehension:

STANDARD E-1	The students will read and make valid inferences from a variety of sources that provide evidence how one or more proposed solutions, set out in the problem statement, compare to the criteria identified, ranked, and explained in the analysis paper.

OBJECTIVES

1. Locate, read, and make valid inferences from a variety of sources in the general area of concern.
2. Identify specific evidence that relates to proposed solutions, either supporting or refuting them.
3. Evaluate the informative value, comprehensiveness, and factuality of this evidence. (See Standard B-1 at this level.)
4. Infer which solution is best (if there is one) based on the evidence.
5. Infer the implications or ramifications of adopting the best solution or of recognizing that none of the solutions are adequate.
6. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD E-2	The students will compose cogent, clear solution papers.

OBJECTIVES

1. Analyze the audience to determine if the conclusions and recommendations will be warmly or negatively received.

2. Choose the best organizational strategy for presenting information to the audience--for a hostile audience, provide the refutation first, the support later; for a warm audience, present the support first, the refutation later.

3. Restate the solutions to the problem and the criteria by which each will be evaluated.

4. Evaluate each solution by all of the criteria.

   Providence ample evidence to demonstrate how each solution meets or surpasses each criterion or how the solution does not meet each criterion.

5. Summarize the results of the comparisons and make conclusions.

6. Describe appropriate recommendations based on previous conclusions. (NOTE: If none of the solutions adequately meet the criteria, the student is faced with two choices; (1) to water down the criteria until a solution adequately meets them, or (2) to call for more research into the research problem--a realistic recommendation.)

7. Use the entire composing process, from invention through final editing.

8. Add words to the expressive vocabulary necessary to complete the task.

Language:

STANDARD E-3	The students will use language effectively and appropriately when composing solution papers.

OBJECTIVES

1. Use concise language. (See Standard D-3 at this level.)

2. Use clear language. Avoid as much jargon as possible. Define all necessary jargon and technical language.

3. Punctuate appropriately.

4. Paragraph appropriately.

5. Use consistently and accurately a recognized style of reference and citation.

6. Produce a final draft that conforms to the standard conventions of contemporary English.

support later; for a warm audience, present the support first, the refutation later.

3. Restate the solutions to the problem and the criteria by which each will be evaluated.

4. Evaluate each solution by all of the criteria.

   Providence ample evidence to demonstrate how each solution meets or surpasses each criterion or how the solution does not meet each criterion.

5. Summarize the results of the comparisons and make conclusions.

6. Describe appropriate recommendations based on previous conclusions. (NOTE: If none of the solutions adequately meet the criteria, the student is faced with two choices; (1) to water down the criteria until a solution adequately meets them, or (2) to call for more research into the research problem--a realistic recommendation.)

7. Use the entire composing process, from invention through final editing.

8. Add words to the receptive vocabulary necessary to complete the task.

Language:

STANDARD E-3	The students will use language effectively and appropriately when composing solution papers.

OBJECTIVES

1. Use concise language. (See Standard D-3 at this level.)

2. Use clear language. Avoid as much jargon as possible. Define all necessary jargon and technical language.

3. Punctuate appropriately.

4. Paragraph appropriately.

5. Use consistently and accurately a recognized style of reference and citation.

6. Produce a final draft that conforms to the standard conventions of contemporary English.

INFORMATIVE REQUEST

Comprehension:

STANDARD F-1	The students will interpret a request for informatio and/or service and evaluate their ability to respond.

OBJECTIVES

1. Comprehend and interpret requests for information and/or service:
    - Identify information and/or services desired.
    - Determine priority of request.
    - Assess personal knowledge of request.
    - Identify other sources that could be informative.
2. Assess audience attributes:
    - Make valid inferences about inquirer's prior knowledge of subject.
    - Make valid inferences about inquirer's purpose.
3. Add to the receptive vocabulary words necessary to complete the task.

Composition:

STANDARD F-2	The students will make a request asking for general and/or specific information and/or services, giving reasons for such requests.

OBJECTIVES

1. Determine needed information and/or services.
2. Identify best possible source(s) of information and/or services and the mailing address of the source(s):
    - Determine audience ability to provide information and/or service desired.
    - Use appropriate reference material (government documents, et cetera).

3. State clearly what is being requested and why the request should be met:

   Use appropriate organizational and logical structures for presenting the request.

   Provide appropriate evidence why the requests should be met.

4. Use appropriate format, language, and tone.

5. Use the entire writing process, from invention through final editing.

6. Add to the expressive vocabulary new words essential to complete the task.

Language:

STANDARD F-3	The students will use language effectively and appropriately when making requests for information.

OBJECTIVES

1. Employ clear, concise language when making requests:

   Use action verbs.

   Use "real" subjects, including first person pronouns (e.g., "We think..." instead of "It was concluded that...").

   Avoid meaningless phrases and transitions (e.g., "It should be noted that...").

   (NOTE: Teachers may want to peruse Revising Prose, Richard Lanham, Scribners, 1981, for more information on writing clear, cogent prose.)

2. Use an appropriate rhetorical strategy (logical, ethical, emotional) for organizing the reasons why the request should be met.

3. Punctuate correctly.

4. Use appropriate format (usually the block letter).

5. Spell correctly new words added to the expressive vocabulary to complete the task.

6. Produce final drafts that conform to the standard conventions of contemporary English.

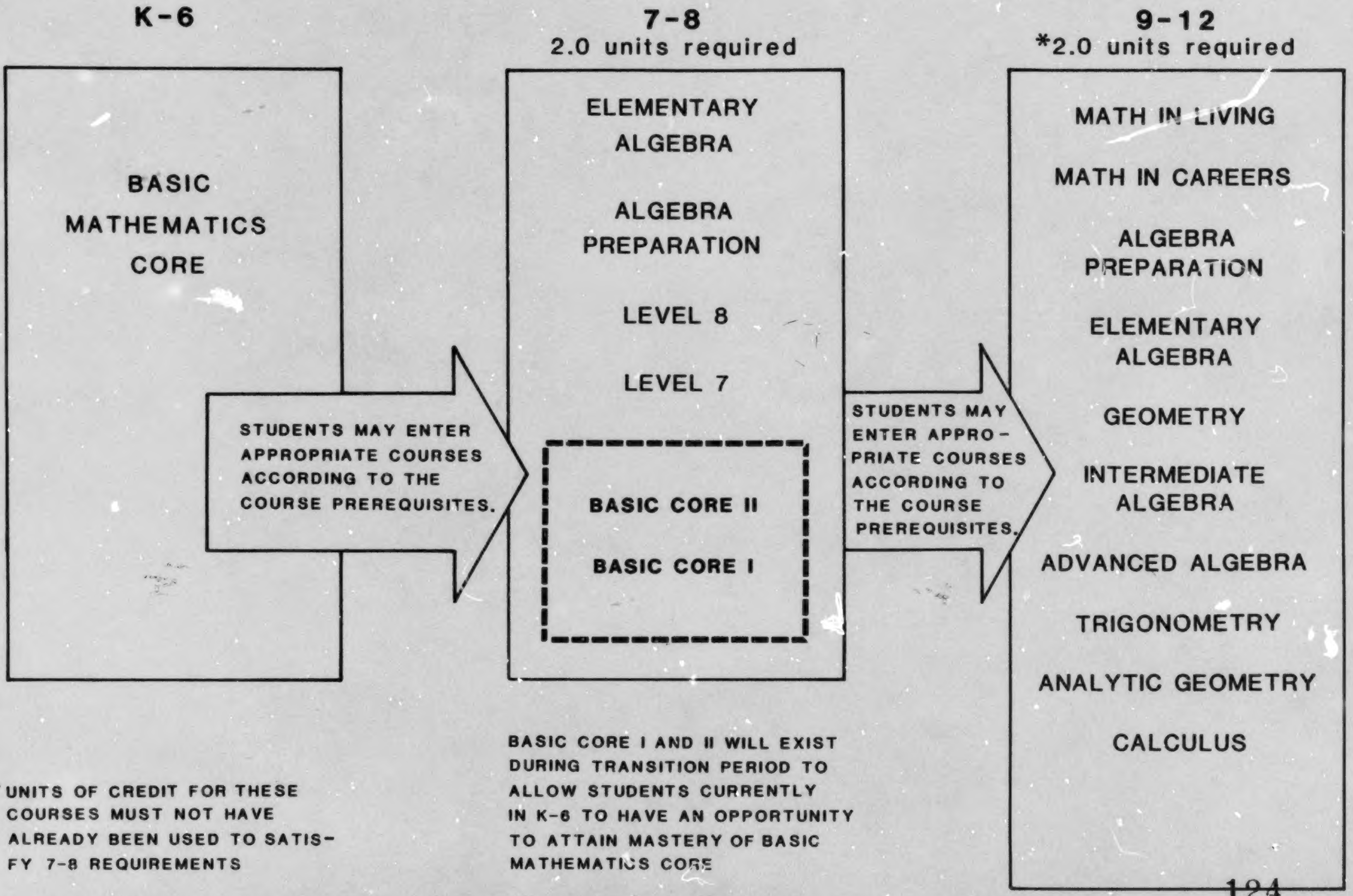
Section B

MATHEMATICS

RECOMMENDED

MATHEMATICS COURSE CHART

FIELD TRIAL



K-6

BASIC MATHEMATICS CORE

STUDENTS MAY ENTER APPROPRIATE COURSES ACCORDING TO THE COURSE PREREQUISITES.

7-8
2.0 units required

ELEMENTARY ALGEBRA

ALGEBRA PREPARATION

LEVEL 8

LEVEL 7

BASIC CORE II

BASIC CORE I

STUDENTS MAY ENTER APPROPRIATE COURSES ACCORDING TO THE COURSE PREREQUISITES.

9-12
*2.0 units required

MATH IN LIVING

MATH IN CAREERS

ALGEBRA PREPARATION

ELEMENTARY ALGEBRA

GEOMETRY

INTERMEDIATE ALGEBRA

ADVANCED ALGEBRA

TRIGONOMETRY

ANALYTIC GEOMETRY

CALCULUS

BASIC CORE I AND II WILL EXIST DURING TRANSITION PERIOD TO ALLOW STUDENTS CURRENTLY IN K-6 TO HAVE AN OPPORTUNITY TO ATTAIN MASTERY OF BASIC MATHEMATICS CORE

*UNITS OF CREDIT FOR THESE COURSES MUST NOT HAVE ALREADY BEEN USED TO SATISFY 7-8 REQUIREMENTS

CORE CURRICULUM FOR MATHEMATICS EDUCATION

K-3

COURSE DESCRIPTION

Mathematics K-3 will identify and apply the numeral concepts extending to 10,000; the four basic operations (+, -, x, ÷) will be developed. Fractions, geometry concepts, and problem solving will be explored and applied.

LEVEL K

STANDARD 1

The students will show numerals are symbolic representations of numbers by mastering the following objectives.

OBJECTIVES

1. Recognize numerals as symbols for numbers.
2. Recognize cardinal numbers (counting numbers to ten) are used to designate the numbers of items within a set.
3. Recognize zero is used to designate the number of elements in the empty set.
4. Read and write numbers from 0 to 10.

STANDARD 2

The students will use physical objects to order and compare numbers related to the environment by mastering the following objectives.

OBJECTIVES

1. Determine basic relationships of size (smaller, larger).
2. Recognize, reproduce, and extend simple patterns.
3. Use one-to-one correspondence to illustrate equivalent and/or nonequivalent sets.
4. Use the idea of "one more than" in developing number sequence.

5. Compare items in sets to develop the idea of "greater than," and "less than," and "equal to."

6. Use the number line (0 to 25) to identify the position of whole numbers.

7. Use ordinal numbers to designate position of objects (first, second, and third).

STANDARD 3

The students will, through computation, relate combinations of numbers to other numbers by mastering the following objectives.

OBJECTIVES

1. Recognize addition is represented by the symbol "+" and the total of the addends follows the symbol "=".

2. Recognize addition is illustrated by the union of sets.

3. Add whole numbers whose sums are five or less.

4. Recognize a set can be divided into subsets.

5. Recognize subtraction can be illustrated by the separation of a set into subsets.

STANDARD 4

The students will use basic geometric shapes by mastering the following objectives.

OBJECTIVES

1. Recognize circles, squares, triangles, and rectangles by their shapes.

2. Compare circles, squares, triangles, and rectangles with physical objects in the environment.

STANDARD 5

The students will show measurement is the comparing of objects with standard units by mastering the following objectives.

OBJECTIVES

1. Recognize standard measuring devices as tools for measuring time, money, length, and weight.
2. Recognize pennies, nickels, and dimes.
3. Use measurements of time, money, length, and weight.

STANDARD 6

The students will use problem solving with concrete objects by mastering the following objectives.

OBJECTIVES

1. Use simple objects to solve problems of addition, comparison, seperation of sets, etc.

LEVEL 1

STANDARD 1	The students will recognize that numerals are symbolic representations for identifying numbers by mastering the following objectives.

OBJECTIVES

1. Recognize numbers from 0 to 100.

STANDARD 2	The students will know numbers can be ordered and compared when related to the environment by mastering the following objectives.

OBJECTIVES

1. Order numbers from 1 to 100.
2. Count numbers by 1's to 100, by 2's to 20, by 5's to 100, and by 10's to 100.
3. Separate the set of counting numbers to ten into subsets of odd numbers and even numbers.
4. Determine the place value of a digit by its position in the numeral (ones and tens).
5. Use groups of ten to demonstrate place value.
6. Identify place value to 99 using expanded notation of numbers.
7. Use the concepts of "less than" and "greater than" to compare numbers to 99.
8. Use ordinal numbers to designate position first through fifth.
9. Use physical objects to demonstrate a knowledge of objectives one through eight.

STANDARD 3	The students will know that through computation, combinations of numbers may be related to other numbers and combinations of objects can be examined by mastering the following objectives.

OBJECTIVES

1. Recognize subtraction is represented by the symbol "-" and equal is represented by the symbol "=".
2. Represent addition and subtraction vertically or horizontally.
3. Recognize zero is the identity element for addition and subtraction.
4. Recognize addition and subtraction as inverse operations.
5. Perform addition facts to 12.
6. Perform addition for sums to 18 using objects.
7. Perform subtraction facts from 12.
8. Perform subtraction for differences from 18 using objects.
9. Add and subtract one-digit and two-digit numbers without regrouping.
10. Recognize the union of sets as associative.
11. Perform subtraction on whole numbers only if the minuend is larger than, or equal to, the subtrahend.

STANDARD 4	The students will use geometry to introduce basic shapes by mastering the following objective.

OBJECTIVE

1. Identify circles, squares, triangles, and rectangles as standard shapes.

STANDARD 5

The students will know that measurement is the comparing of objects with standard units by mastering the following objectives.

OBJECTIVES

1. Use standard measuring devices as tools to compare length, volume, time, money, and weight.
2. Tell time in hour and half-hour dimensions.
3. Identify that pennies, nickels, and dimes have specific values.
4. Combine combinations of coins to dimes.
6. Measure to the nearest inch and/or centimeter.
7. Categorize time in minutes, hours, days, months, or seasons.

STANDARD 6

The students will know that mathematics is used to solve problems in the environment by mastering the following objectives.

OBJECTIVES

1. Translate oral word problems into mathematical sentences.
2. Use various levels and techniques of thinking to solve traditional (textbook) and non-traditional word problems.

LEVEL 2

STANDARD 1	The students will know that numeration systems provide symbolic representations for comparing numbers and identifying characteristics relative to other numbers by mastering the following objectives.

OBJECTIVES

1. Count numbers from 1 to 1,000.
2. Write numbers from 0 to 100.
3. Separate a geometric figure into equal parts so that each part represents a fractional portion of the original unit.
4. Identify symbols and names for fractions (1/2, 1/3, 1/4).

STANDARD 2	The students will know that numbers can be ordered and compared by mastering the following objectives. When related to the environment, numbers can be used to order and compare characteristics of various components of the environment.

OBJECTIVES

1. Order numbers from 1 to 1,000.
2. Determine the place value of a digit by its position in the numeral (ones, tens, and hundreds).
3. Identify place value to 999 using expanded notation of numbers.
4. Separate the set of counting numbers to 100 into subsets of even and odd numbers.
5. Identify ordinal numbers to 10th.
6. Compare two numbers using symbols greater than (>), less than (<) and equal (=), to 99.
7. Use objects from the environment to demonstrate a knowledge of Objectives 1 through 5.

STANDARD 3

The students will know that through computation, combinations of numbers may be related to other numbers by mastering the following objectives. Characteristics of groups of objects can be related to numbers and combinations of objects can be examined.

OBJECTIVES

1. Perform single digit addition facts to sums of 18.
2. Perform subtraction facts for differences from 18.
3. Add and subtract three-digit numbers without regrouping.
4. Add two-digit and three-digit numbers with regrouping.
5. Add three, single-digit numbers.
6. Identify a missing addend in the second position.
7. Recognize multiplication as repeated addition.
8. Recognize the operation of multiplication by the symbol "x".
9. Use physical objects to demonstrate a knowledge of Objectives 1 through 8.

STANDARD 4

The students will show geometry is used to symbolically explore the relationships of one-, two-, and three-dimensional objects in the environment by mastering the following objectives.

OBJECTIVES

1. Recognize congruent shapes in one-, two-, and three-dimensional objects.
2. Measure perimeter of basic geometric figures to the nearest whole unit.

STANDARD 5

The students will show measurement is the comparing of objects with standard units by mastering the following objectives.

OBJECTIVES

1. Measure the length of objects in centimeters, meters, inches, feet, and yards.
2. Identify quarters, half-dollars, and dollars and compare their specific values.
3. Make monetary change for a quarter using pennies, nickels, and dimes.
4. Measure time in hours, half-hours, and five-minute intervals.

STANDARD 6

The students will use mathematics to solve problems in the environment by mastering the following objectives.

OBJECTIVES

1. Read and construct bar graphs, tallies, and pictographs.
2. Use various techniques to solve traditional (textbook) and non-traditional problems.

LEVEL 3

STANDARD 1	The students will know the numeration systems provide symbolic representations for comparing numbers and identifying characteristics relative to other numbers by mastering the following objectives.

OBJECTIVES

1. Identify periods in numeral to 99,999.
2. Recognize, count, and write numerals to 10,000.
3. Identify the fractional expression for a part of a set or region.

STANDARD 2	The students will show that numbers can be ordered and compared. When related to the environment, numbers can be used to order and compare characteristics of various components of the environment by mastering the following objectives.

OBJECTIVES

1. Determine the place value of a digit by its position in the numeral (up to 10,000).
2. Identify place value to 9,999, using expanded notation of numbers.
3. Compare numbers using symbols greater than (>), less than (<), and (=), to 9,999.
4. Use numbers to compare characteristics of physical objects and activities in living.

STANDARD 3

The students will know that through computation, combinations of numbers may be related to other numbers by mastering the following objectives. Characteristics of groups of objects can be related to numbers and combinations of objects can be examined.

OBJECTIVES

1. Add and subtract three-digit numerals with regrouping.
2. Give the basic multiplication facts through 9 x 9.
3. Recognize the number zero, used as a factor, yields the product of zero.
4. Multiply a two-digit numeral by a one-digit numeral with regrouping.
5. Recognize multiplication and division are inverse operations.
6. Recognize division can be represented by the symbols "÷" and "┌".
7. Perform division using the basic division facts. (Single digit divisor).
8. Recognize that in division by one, the quotient is the same as the dividend.
9. Divide a two-digit numeral by a one-digit numeral with zero and non-zero remainders.
10. Use physical objects to demonstrate Objectives 1 through 9.

STANDARD 4

The students will use geometry to symbolically explore the relationships of one-, two-, and three-dimensional objects in the environment by mastering the following objectives.

OBJECTIVES

1. Recognize geometric figures that exhibit symmetry.
2. Recognize that parallel lines in a plane do not intersect.
3. Recognize the center, radius, and diameter of a circle.

4. Recognize cubes, spheres, cylinders, and pyramids.

STANDARD 5	The students will use measurement to compare objects with standard units by mastering the following objectives.

OBJECTIVES

1. Measure length to the nearest half unit.
2. Measure time in hour, half-hour, quarter-hour, and five-minute intervals.
3. Combine coins to $1.00.
4. Read, write, add, and subtract monetary expressions to $100.00.
5. Give dollar notation for cent notation.

STANDARD 6	The students will use mathematics to solve problems in the environment by mastering the following objectives.

OBJECTIVES

1. Solve word problems (including the use of money) using addition, subtraction, multiplication, and division.
2. Use various techniques to solve traditional (textbook) and non-traditional word problems.

CORE CURRICULUM FOR MATHEMATICS EDUCATION

4-6

COURSE DESCRIPTION

Mathematics (4-6) develops the four basic operations (add, subtract, multiply and divide) on rational numbers (including decimal forms). Elementary geometric relationships are explored. Measurements in various forms and systems are mastered. The structure of mathematics is developed. Mathematics is used to solve problems.

LEVEL 4

STANDARD 1

The students will understand that numeration systems provide symbolic representations for comparing numbers and identifying characteristics relative to other numbers by mastering the following objectives.

OBJECTIVES

1. Read and write numerals to 100,000,000.
2. Recognize, read, and write place values to 100,000,000.

STANDARD 2

The students will show that numbers can be ordered and compared by mastering the following objectives.

OBJECTIVES

1. Round numbers to estimate sums and differences.
2. Put fractions with like denominators in order.
3. Order numbers to 10,000.

STANDARD 3

The students will show that through computation, combinations of numbers may be related to other numbers by mastering the following objectives. Objects can be related to numbers, and combinations of objects can be examined.

OBJECTIVES

1. Add and subtract four-digit numerals with regrouping.
2. Compute the product of one-digit multiplier and up to three-digit multiplicand.
3. Give the basic multiplication facts 0 to 9.
4. Compute multiplication by zero.
5. Compute a two-digit quotient using a one-digit divisor.
6. Compute a two-digit quotient using a two-digit divisor.
7. Give the basic division facts 1 to 9.
8. Recognize that division by zero is undefined.
9. Add and subtract fractions with like denominators.
10. Identify fractions equal to 1.
11. Add and subtract mixed and proper fractions using like denominators without regrouping.

STANDARD 4

The students will understand that geometry is used to symbolically explore the relationships of one-, two-, and three-dimensional objects in the environment by mastering the following objectives.

OBJECTIVES

1. Identify a line segment by its end points.
2. Identify a simple closed figure composed of three or more segments which intersect only at their end points.
3. Identify three-dimensional figures, such as cubes, triangular pyramids, cones, cylinders, and spheres.

STANDARD 5

The students will understand that measurement is the comparing of objects with standard units by mastering the following objectives.

OBJECTIVE

1. Measure length to 1/8 inch accuracy.
2. Measure length to nearest millimeter.
3. Convert meters to kilometers.
4. Measure the perimeter of a geometric figure.
5. Give area in square units.
6. Measure time: minutes, hours, days, weeks, months, and years.
7. Select an appropriate unit of weight.

STANDARD 6

The students will understand that mathematics is used to solve problems in the environment by mastering the following objectives.

OBJECTIVES

1. Using four-digit numbers in a story problem context, identify the subtraction process as the correct method for solution.
2. Using one-digit multipliers in a story problem context, identify the multiplication process as the correct method for solution.
3. Using a one-digit divisor in a story problem context, identify the division process as the correct method for solution.
4. Using story problem context, add, subtract, and multiply monetary denominations less than $100.00.

STANDARD 7	The students will be aware that explorations in mathematics develop an understanding of the structure of arithmetic by mastering the following objectives.

OBJECTIVES

1. Recognize the factors of a number.
2. Recognize that mathematical sentences can be either true or false.
3. Separate a geometric figure into equal parts so that each part represents a fractional portion of the original unit.
4. Identify parts of a fraction as numerator, denominator, and fraction bar.
5. Identify mixed numbers, proper fractions, and improper fractions.

LEVEL 5

STANDARD 1

The students will understand that numeration systems provide symbolic representations for comparing numbers and identifying characteristics relative to other numbers by mastering the following objectives.

OBJECTIVES

1. Read and write numbers through 100 billion.
2. Give the standard number for a Roman numeral.

STANDARD 2

The students will demonstrate that numbers can be ordered and compared when related to the environment, and can be used to order and compare characteristics of various components of the environment by mastering the following objectives.

OBJECTIVES

1. Compare decimal numbers (< , >, =) to hundredths.
2. Recognize an equivalent decimal.
3. Compare two integers using the number line.

STANDARD 3

The students will show that through computation, combinations of numbers may be related to other numbers by mastering the following objectives. Objects can be related to numbers and combinations of objects can be examined.

OBJECTIVES

1. Compute multiplication using two- and three-place factors.
2. Compute quotients using two-digit divisors and two-digit quotients.
3. Write improper fractions in the form of mixed numerals.

4. Add and subtract rational numbers (fractions) with unlike denominators.

5. Add and subtract rational numbers using zero as the identity element.

6. Write decimal numbers in rational (fraction) form.

7. Add and subtract mixed numbers.

8. Give a mixed number for an improper fraction.

9. Multiply rational numbers.

10. Identify the numerator of an equivalent fraction.

11. Estimate sums, differences, products, and quotients.

12. Add and subtract numbers, including numbers up to three decimal places.

13. Identify equivalent fractions.

14. Multiply with decimals.

15. Using ordered pairs of numbers, determine the rule that shows how the second number is related to the first number in each ordered pair.

16. Determine the average of a set of data to the nearest whole number (mean).

STANDARD 4

The students will understand that geometry is used to symbolically explore the relationships of one-, two-, or three-dimensional objects in the environment by mastering the following objectives.

OBJECTIVES

1. Identify and draw rays, lines, line segments, and angles.

2. Identify and draw perpendicular and parallel lines.

3. Identify the parts of a circle (center point, circumference, radius, diameter).

4. Recognize three-dimensional shapes.

5. Identify lines of symmetry.

STANDARD 5	The students will understand that measurement is the comparing of objects with English and metric units by mastering the following objectives.

OBJECTIVES

1. Measure temperature in Celsius and Fahrenheit degrees.
2. Measure an angle with a protractor to the nearest five degrees.
3. Give length to the nearest eighth inch, nearest sixteenth inch.
4. Measure and compute perimeter.
5. Compute the area of a rectangle, given a formula.

STANDARD 6	The students will understand that mathematics is used to solve problems in the environment by mastering the following objectives.

OBJECTIVES

1. Read and interpret data on graphs, charts, and tables.
2. Graph ordered pairs on a rectangular grid using positive numbers.
3. Describe the location or points on a rectangular grid using positive numbered coordinates.
4. Solve story problems using addition of three numbers with decimals.
5. Solve two-statement problems using multiplication with monetary denominations.
6. Solve story problems using subtraction of mixed numbers.
7. Solve story problems using multiplication of fractions and whole numbers.
8. Solve story problems using division and interpreting the remainder.
9. Solve story problems using addition with "too much" information.

STANDARD 7

The students will demonstrate that explorations in mathematics develops an understanding of the structure of arithmetic by mastering the following objectives.

OBJECTIVES

1. Demonstrate that the place value of digits to the left of the decimal point increases by powers of ten, while the place value of digits to the right of the decimal point decreases by powers of ten.
2. Recognize prime numbers up to 97.
3. Identify integers divisible by two, three, and five.
4. Recognize that addition and subtraction of rational numbers are inverse operations.
5. Identify union (U) and intersection (∩) of two given sets.

LEVEL 6

STANDARD 1	The students will understand that numeration systems provide symbolic representations for comparing numbers and identify characteristics relative to other numbers by mastering the following objectives.

OBJECTIVES

1. Read and write numbers less than or equal to one hundred trillion.
2. Identify the reciprocal of any rational number.

STANDARD 2	The students will demonstrate that numbers can be ordered and compared when related to the environment and can be used to order and compare characteristics of various components by mastering the following objectives.

OBJECTIVES

1. Order two rational numbers.
2. Represent the same quantity by percents, decimals, and fractions.
3. Compare decimal numbers (<, >, =) to thousandths.

STANDARD 3	The students will show that through computation, combinations of numbers may be related to other numbers by mastering the following objectives. Objects can be related to numbers and combinations of objects can be examined.

OBJECTIVES

1. Compute multiplication using three or more digit factors.
2. Compute division using two- and three-digit divisors, three- and four-digit quotients.

3. Identify equivalent fractions.
4. Simplify fractions to lowest terms.
5. Add mixed numbers using unlike denominators with renaming.
6. Subtract mixed fractions using unlike denominators with renaming.
7. Multiply common fractions and write in simplest form.
8. Multiply mixed number fractions and write in simplest form.
9. Divide common fractions and write in simplest form.
10. Divide mixed number fractions and write in simplest form.
11. Write rational numbers in decimal and percent forms.
12. Add one-, two-, and three-place decimal numbers.
13. Subtract one-, two-, and three-place decimal numbers.
14. Multiply one-, two, and three-place decimal numbers.
15. Divide one-, two, and three-place decimal numbers (include decimal divisors).
16. Multiply and divide decimals by tens and hundreds.
17. Compute percentages of given numbers.
18. Determine the average of a set of data.
19. Determine the median of a set of data.

STANDARD 4

The students will understand that geometry is used to symbolically explore the relationships of one-, two-, and three-dimensional objects in the environment by mastering the following objectives.

OBJECTIVES

1. Define a right angle.
2. Define a right triangle, square, and rectangle.
3. Relate the above definitions to objects in the environment.

STANDARD 5

The students will understand measurement is the comparing of objects with English and metric units by mastering the following objectives.

OBJECTIVES

1. Measure angles to the nearest degree (°).
2. Determine the sum of the angles in a triangle.
3. Compute the area of a triangle, given a formula.
4. Compute the volume of a rectangular prism, given a formula.

STANDARD 6

The students will understand that mathematics is used to solve problems in the environment by mastering the following objectives.

OBJECTIVES

1. Read information on a chart.
2. Solve word problems using subtraction of decimal numbers.
3. Solve word problems multiplying money denominations by percents.
4. Solve word problems using subtraction of mixed fractions with unlike denominators.
5. Solve word problems using perimeter.
6. Graph ordered pairs of integers on a rectangular grid.
7. Read and interpret scale drawings.

STANDARD 7

The students will demonstrate that explorations in mathematics develops an understanding of the structure of arithmetic by mastering the following objectives.

OBJECTIVES

1. Recognize that the sum of an integer and its opposite is zero.
2. Recognize that the product of any rational number and its reciprocal (except zero) is 1.
3. Recognize that multiplication and division of rational numbers are inverse operations.
4. Identify an equivalent ratio.
5. Recognize that missing terms in equivalent ratios are determined through mathematical processes.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Basic Core I	1	Registration restricted

COURSE DESCRIPTION

This course is designed to focus on the concepts from Levels K-6 not previously mastered by each student. Students who have shown mastery on Levels K-6 will not be permitted to enroll. It is anticipated that this course may not exist after students currently in K-6 have an opportunity to master the Basic Mathematics Core.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Basic Core II	1	Registration restricted

COURSE DESCRIPTION

A continuation of Basic Core I is for students requiring additional time to master the core of Levels K-6. This course is designed for the transition to mastery learning and may not exist after the students currently in K-6 have had an opportunity to master the Basic Mathematics Core.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Level 7	1	Mastery of Level 6

COURSE DESCRIPTION

Students in Level 7 will perform the four basic operations on natural numbers, whole numbers, integers, rational numbers (including decimal forms), and nondecimal systems of numbers; will use integers as exponents; will factor numbers into prime factors; and will apply these skills in life problem solving.

STANDARD 1	The students will demonstrate knowledge of the properties of the integer and rational number systems.

OBJECTIVES

1. Define the set of integers
2. Know that the sum and difference of integers are always integers. (Closure)
3. Know that addition of integers is associative and commutative, and subtraction of integers is neither associative nor commutative.
4. Know that multiplication of integers is commutative and associative, and division of integers is neither associative nor commutative.
5. Know that a rational number is a number that can be expressed in the form $\frac{a}{b}$ where "a" and "b" are integers and $b \neq 0$.
6. Know that every integer is a rational number.
7. Compare rational numbers by using the symbols $<$, $>$, $=$, $\neq$, $\leq$, $\geq$.

STANDARD 2	The students will demonstrate knowledge of the rational number system.

OBJECTIVES

1. Perform addition, subtraction, multiplication, and division operations with the set of rational numbers.
2. Write a rational number in rational, decimal, and percent form.
3. Show that those exponents which are natural numbers indicate how many times another number (the base) is being used as a repeated factor.
4. Use positive integers as exponents.
5. Evaluate arithmetic expressions which contain grouping symbols.
6. Factor any given integer into a unique set of prime numbers without regard to order.
7. Calculate the greatest common factor (GCF) of two positive integers.
8. Calculate the least common multiple (LCM) of two positive integers.

STANDARD 3	The students will demonstrate knowledge of measurement.

OBJECTIVES

1. Know that measurement is the comparison of things to standardized units.
2. Measure length, volume, mass, temperature, and time using the metric system.
3. Measure length, volume, weight, temperature, and time using the U. S. Common System.

STANDARD 4	The students will demonstrate computational skills to solve applied problems, using rational numbers.

OBJECTIVES

1. Use the perimeter, circumference, and area formulas of simple geometric figures in problem solving.

2. Solve word problems involving rational numbers expressed in three forms (rational, decimal, percent).

STANDARD 5

The students will demonstrate an understanding of the structure of Cartesian (coordinate) plane.

OBJECTIVES

1. Know that the axes of the rectangular coordinate system separate the plane into quadrants.
2. Graph ordered pairs of integers on the Cartesian (coordinate) plane in all quadrants.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Level 8	1	Mastery of Level 7

COURSE DESCRIPTION

Students on Level 8 will compute using real numbers; will show geometric relationships; and solve simple linear equations.

STANDARD 1

The students will demonstrate knowledge of the properties of the real number system.

OBJECTIVES

1. Know that for every real number there is a point on the number line which corresponds to it.
2. Know that non-terminating, non-repeating decimals are irrational numbers.
3. Know that a real number is a rational or an irrational number.

STANDARD 2

The students will demonstrate knowledge of the real number system.

OBJECTIVES

1. Perform the operations of +, -, x, and ÷ on the real numbers.
2. Show that those exponents which are positive integers indicate how many times another number (the base) is being used as a repeated factor.
3. Evaluate expressions using the order of operations and grouping symbols.
4. Know that the square root of a whole number is either a whole number or an irrational number.
5. Know that the square root of a given number is that number which when multiplied by itself yields the given number.
6. Know that negative numbers do not have a square root in the set of real numbers.

FIELD TRIAL

STANDARD 3	The students will demonstrate knowledge of measurement.

OBJECTIVES

1. Perform conversions between units of measure within the metric system.
2. Perform conversions between units of measure within the U.S. Common System.
3. Approximate conversions between units of measure in the metric system and the U. S. Common System.

STANDARD 4	The students will demonstrate ability to solve applied problems, using the real number system.

OBJECTIVES

1. Solve applied problems with real numbers.
2. Calculate the arithmetic mean, median, and mode for a given set of data.

STANDARD 5	The students will demonstrate knowledge of geometry.

OBJECTIVES

1. Know that a regular polygon is a polygon with equal sides and equal angles.
2. Know that in congruent polygons, corresponding sides are congruent and corresponding angles are congruent.
3. Know that the Pythagorean Theorem (property) states that in a right triangle whose legs are lengths A and B, and whose hypotenuse is length C, then $C^2 = A^2 + B^2$.

4. Know that volume is the measure of the spatial region enclosed in a three-dimensional figure.

5. Use formulas in the computation of volume and surface area of three-dimensional figures.

STANDARD 6	The students will demonstrate knowledge of mathematical sentences.

OBJECTIVES

1. Know that a function is a relation in which no two ordered pairs of numbers have the same first value.

2. Know that an equivalent relation is obtained if the same number is added to or subtracted from both sides of the relation.

3. Know that an equivalent relation is obtained if both members of an equation are multiplied by the same number, or divided by the same number (divisor not zero).

4. Solve equations involving ratio and proportion.

5. Derive a table of ordered pairs from an equation of the form $X + Y = K$, where K is constant.

6. Graph linear equations of the form $Y = X + K$ on a rectangular coordinate system (Cartesian Plane).

7. Solve simple equations using more than one property of equality.

8. Write, translate, and solve equations from simple word problems.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Algebra Preparation	1	Mastery through Level 6 (Registration restricted)

COURSE DESCRIPTION

Algebra Preparation builds a foundation for those students who will take Elementary Algebra. This course is designed to give the student an understanding of the real number system, its properties, structure, operations, laws, vocabulary, and symbols. Algebraic and geometric concepts are introduced, and solving simple linear equations will be mastered. Standards of Levels 7 and 8 are included.

STANDARD 1	The students will demonstrate a knowledge of set terminology and perform basic set operations.

OBJECTIVES

1. Define a set.
2. Classify sets as finite or infinite.
3. Define a subset.
4. Define the null or empty set.
5. Use the union of sets.
6. Use the intersection of sets.
7. Define the disjoint sets.

STANDARD 2	The students will demonstrate knowledge of the properties, structure, and vocabulary of the rational numbers and ability to perform the basic operations on real numbers.

OBJECTIVES

1. Define factoring.
2. Define natural numbers.

3. Partition natural numbers into primes, composites, and the number one.

4. Find the prime factorization of a natural number (understand prime factorization is unique).

5. Determine the greatest common factor (GCF) of two natural numbers.

6. Determine the least common multiple (LCM) of two natural numbers.

7. Define relatively prime.

8. Define whole numbers.

9. Define the additive identity element.

10. Know that if any product is the number zero, then at least one of the factors must be the number zero.

11. Define integers.

12. Determine the sum and difference of integers.

13. Determine the product and quotient of integers.

14. Know that the sum of every integer and its additive inverse is the number zero.

15. Define divisibility.

16. Define rational numbers.

17. Classify rational numbers as either a repeating decimal or a terminating decimal.

18. Know that the operations of addition and multiplication are commutative with respect to the rational numbers.

19. Know that the operations of addition and multiplication are associative with respect to the rational numbers.

20. Know that multiplication is distributive over addition with respect to the rational numbers.

21. Define the multiplicative identity element.

22. Define the multiplicative inverse (reciprocal).

23. Perform the operations of addition, subtraction, multiplication, and division on rational numbers.

24. Express a fraction in decimal form.

25. Define the trichotomy principle ($a = b$, $a > b$, or $a < b$).

26. Know that for every real number there is a one-to-one correspondence to a point on the number line.

27. Know that a non-terminating, non-repeating decimal is an irrational number.

28. Know that a real number is a rational or an irrational number.

29. Perform the operations of addition, subtraction, multiplication, and division on the real numbers.

30. Evaluate expressions using the order of operations and grouping symbols.

STANDARD 3	The students will demonstrate knowledge of open sentences and the ability to solve simple linear equalities.

OBJECTIVES

1. Define a variable.

2. Know that a mathematical sentence is either true or false or open.

3. Compare rational numbers using the following symbols: $=$, $\neq$, $<$, $>$, $\leq$, $\geq$.

4. Define a solution (or root) for a mathematical sentence.

5. Determine a solution set for a mathematical sentence from a given replacement set.

6. Know that there is exactly one point on the number line corresponding to any given rational number.

7. Know that on a horizontal number line, a given number is greater than any number located to the left of that given number.

8. Find equivalent equations by adding, subtracting, multiplying, and dividing the same rational number relative to both members of an equation.

STANDARD 4	The students will demonstrate knowledge of exponents and radicals.

OBJECTIVES

1. Write a number in exponential form.
2. Know that the natural number exponent tells how many times the base is used as a factor.
3. Define the square root of a natural number.
4. Know that negative numbers do not have square roots in the set of real numbers.
5. Know that the square root of a given number is that number which multiplied by itself yields the given number.

STANDARD 5	The students will demonstrate knowledge of ratio, proportion, and percent.

OBJECTIVES

1. Define and use a ratio.
2. Define a proportion and use proportions to solve problems.
3. Define percent as a rational number. Know that percent is the ratio of a number compared to 100.
4. Solve simple problems involving percent.

STANDARD 6	The students will demonstrate knowledge of simple plane geometry.

OBJECTIVES

1. Define perimeter, circumference, area, radius, and diameter.
2. Name and classify triangles, quadrilaterals, and circles.

3. Find perimeter and area of triangles, quadrilaterals, and circles.

4. Use formulas to compute the perimeters and areas of triangles, quadrilaterals, and circles.

5. Know that the axes of a rectangular coordinate system separate the plane into quadrants.

6. Graph a set of ordered pairs.

7. Know that a regular polygon is a polygon with equal sides and equal angles.

8. Know that in congruent polygons, corresponding sides are congruent and corresponding angles are congruent.

9. Know that the Pythagorean Theorem (property) states that in a right triangle whose legs are lengths A and B, and whose hypotenuse is length C, then $C^2 = A^2 + B^2$.

10. Know that volume is the measure of the spatial region enclosed in a three-dimensional figure.

11. Use formulas in the computation of surface area and volume of three-dimensional figures.

STANDARD 7	The students will demonstrate knowledge of measurement.

OBJECTIVES

1. Know that measurement is the comparison of things to standard units.

2. Measure length, volume, mass, temperature, and time using the metric system.

3. Measure length, volume, weight, temperature, and time using the U. S. Common System.

4. Perform conversions between units of measure within the metric system.

5. Perform conversions between units of measure within the U. S. Common System.

6. Approximate conversions between units of measure in the metric system and the U.S. Common System.

STANDARD 8

The students will demonstrate knowledge of graphing on the rectangular coordinate system.

OBJECTIVES

1. Derive a table for ordered pairs from an equation of the form $X + Y = K$, where K is constant.
2. Graph a set of ordered pairs.
3. Graph linear equations of the form $Y = X + K$, where K is a constant.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Elementary Algebra	1.0	Mastery of Level 8 or Algebra Preparation

COURSE DESCRIPTION

Elementary Algebra develops a mathematical model for the real number system involving the study of straight lines and numerical relationships. The properties of the real number system are used to solve linear equations and inequalities. Simple operations with polynomials are introduced and the laws of exponents are studied.

STANDARD 1	The students will demonstrate knowledge of the properties of equalities.

OBJECTIVES

1. Know that for any "a," then a = a, (reflexive property of equality.
2. Know that for any "a" and "b," if a = b then b = a (symmetric property of equality).
3. Know that for any "a," "b," or "c" if a = b and b = c, then a = c (transitive property of equality).
4. Know that adding or subtracting the same numbers to both members (sides) of an equation yields an equivalent equation.
5. Know that multiplying or dividing (divisor not zero) both members (sides) of an equation by the same number yields an equivalent equation.

STANDARD 2	The students will demonstrate knowledge of real numbers.

OBJECTIVES

1. Define the set of real numbers.
2. Define closure.

3. Know that in the set of real numbers, the operations of addition and multiplication are commutative and associative, but subtraction and division are neither commutative nor associative.

4. Know that multiplication is distributive over addition and subtraction in the set of real numbers.

5. Know that zero is the additive identity for the set of real numbers.

6. Know that the number one is the multiplicative identity for the set of real numbers.

7. Know that the sum of a real number and its additive inverse (opposite) is zero.

8. Know that zero is its own additive inverse in the set of real numbers.

9. Know that the product of a non-zero real number and its multiplicative inverse (reciprocal) is the number one.

10. Know that zero does not have a multiplicative inverse.

11. Know that the product of real numbers is zero if and only if at least one of its factors is zero.

12. Define absolute value.

13. Define prime number.

14. Define composite number.

15. Define relatively prime.

16. Know that every natural number has a unique prime factorization.

17. Identify the least common multiple (LCM) of two or more given natural numbers.

18. Identify the greatest common factor (GCF) of two or more given natural numbers.

19. Add, subtract, multiply, and divide real numbers.

20. Know that a natural number exponent indicates how many times the base is used as a factor.

STANDARD 3

The students will demonstrate knowledge of polynomial and other algebraic expressions.

OBJECTIVES

1. Define an algebraic term.
2. Define an algebraic expression.
3. Classify polynomials by the number of terms or by degree.
4. Know the order of operations.
5. Add, subtract, and multiply polynomials, and divide a plynomial by a monomial.
6. Simplify rational algebraic expressions.
7. Know that rational algebraic expressions are reduced when the greatest common factor of both the numerator and the denominator is one.
8. Know that a number can be written in exponential form "a^n" where "a" is the base and "n" is the exponent.

STANDARD 4

The students will demonstrate ability to solve simple linear equalities and inequalities.

OBJECTIVES

1. Define algebraic sentences (equalities and inequalities).
2. Solve simple rational algebraic equations.
3. Define root (solution).
4. Define a solution set.
5. Know that equivalent open sentences have the same solution set.
6. Know that if the same number is added to or subtracted from each member of an inequality, the sense of the inequality is preserved.
7. Know that if each member of an inequality is multiplied or divided by the same positive number, the sense of the inequality is preserved.
8. Know that if each member of an inequality is multiplied or divided by the same negative number, the sense of the inequality is reversed.

9. Solve simple systems of linear equations containing two equations and two variables.
10. Solve simple word problems.

STANDARD 5	The students will demonstrate knowledge of graphing.

OBJECTIVES

1. Know that the axes of a rectangular (Cartesian) coordinate system separates a plane into quadrants.
2. Know that the rectangular coordinate system establishes a "one-to-one" correspondence between the set of all ordered pairs of real numbers and the set of points in a plane.
3. Define a relation.
4. Define abscissa and ordinate.
5. Define the domain and range of a relation.
6. Define slope of a line.
7. Know that when a line rises from left to right, its slope is a positive number.
8. Know that when a line falls from left to right, its slope is a negative number.
9. Know that the slope of a horizontal line is zero.
10. Know that the slope of a vertical line is undefined.
11. Know that the graph of a first degree polynomial equation in one or two variables on the Cartesian Coordinate System is a straight line.
12. Know that the graph of a linear inequality in one variable on the real number line is a subset of a straight line.
13. Graph the solution set of a linear equation in one or two variables.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Geometry	1	Mastery of Elementary Algebra

COURSE DESCRIPTION

The major postulates and theorems of Euclidean geometry form the basis of this course, logical structures are investigated. Coordinate geometry is studied and non-Euclidean geometries are introduced.

STANDARD 1	The students will demonstrate knowledge of the basic terms and definitions of Euclidean geometry.

OBJECTIVES

1. Know the undefined terms of geometry: point, line, and plane.
2. Know that a definition names the term being defined, classifies the term, describes the term, and is reversible.
3. Define a ray.
4. Define an angle.
5. Define parallel lines.
6. Define a transversal.
7. Define polygon.
8. Define congruency.
9. Define a bisector.
10. Define similar figures.
11. Define a circle.
12. Define a sphere.

STANDARD 2	The students will demonstrate knowledge of principals of logic.

OBJECTIVES

1. Use basic principles of logic.
2. Define a logical statement as a statement which is either true or false, but not both.
3. Know that statements in the "if-then" form are statements of implication (conditional).
4. Know that if A implies B, then not A implies not B is the inverse of A implies B.
5. Know that if A implies B, then not B implies not A is the contrapositive of A implies B.
6. Know that if A implies B, then B implies A is the converse of A implies B.
7. Know that the phrase "if and only if" refers to biconditional statements.
8. Know that a mathematical system is based on a set of unproved statements called assumptions, axioms, or postulates.
9. Know that a proof of a theorem is a logical sequence of statements which leads from the hypothesis to the conclusion.

STANDARD 3	The students will demonstrate knowledge of the properties of equality and inequality.

OBJECTIVES

1. Know that if A is related to A, then the relation is reflexive.
2. Know that if A is related to B and B is related to A, then the relation is symmetric.
3. Know that if A is related to B and B is related to C implies that A is related to C, then the relation is transitive.
4. Know that an equivalence relation is a relation which satisfies the reflexive, symmetric, and transitive properties.

STANDARD 4	The students will demonstrate knowledge of relationships between angles.

OBJECTIVES

1. Classify an angle as acute, right, obtuse, or straight.
2. Define supplementary angles.
3. Define complimentary angles.
4. Calculate the measure of angles in degrees and minutes.
5. Define right angles as angles formed by the intersection of two perpendicular lines.
6. Classify types of angles formed when two lines are intersected by a transversal as alternate interior, corresponding, alternate exterior, and interior angles on the same side of the transversal.
7. Define adjacent angles.
8. Define vertical angles.

STANDARD 5	The students will demonstrate knowledge of triangles.

OBJECTIVES

1. Define a triangle.
2. Define altitudes, median, and angle bisectors of a triangle.
3. Classify a triangle according to the measure of its sides or by its largest angle.
4. Know that the sum of the measures of the three interior angles of a triangle is 180°.
5. Show congruency of triangles by use of geometric methods.
6. Know that the sum of the measures of two sides of a triangle is greater than the measure of the third side.

7. Know that in a 30-60-90 right triangle, the side opposite the angle whose measure is 30° is half the length of the hypotenuse.

STANDARD 6

The students will demonstrate knowledge of the circle and the relationships between circles and lines.

OBJECTIVES

1. Identify chords, secants, tangents, radii, and diameters relative to a circle.
2. Define an arc.
3. Know how the measure of inscribed angles, central angles, angles formed by a tangent and a chord, or angles formed by two intersecting chords are related to the measures of their respective intercepted arcs.
4. Know how the measure of the angles formed by two secant lines, two tangent lines, or a tangent line and a secant line are related to the measure of the intercepted arcs of the circle.
5. Know that a circle is circumscribed about a figure if each vertex of the figure lies on the circle.
6. Know that a circle is inscribed in a figure if each side of the figure is tangent to the circle.

STANDARD 7

The students will demonstrate knowledge of length, area, volume, and angle measure of geometric figures.

OBJECTIVES

1. Add or subtract the measure of angles.
2. Know the Pythagorean theorem.
3. Compute areas of triangles, rectangles, parallelograms, trapezoids, and circles by formula.
4. Compute areas and volumes of cubes, prisms, right circular cylinders, right circular cones, and spheres by formula.
5. Determine the distance between two points by formula.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Intermediate Algebra	1	Mastery of Elementary Algebra

COURSE DESCRIPTION

This course in algebra is an extension of the elementary algebraic concepts involving a study of the quadratic relations and their graphs. Systems of equations are solved, logarithmic functions are briefly studied, real number exponents and complex numbers are investigated and a proficiency with the algebra of polynomials and rational functions is developed.

STANDARD 1

The students will demonstrate knowledge of linear systems.

OBJECTIVES

1. Know that the solution set of an open mathematical sentence in two variables is the set of ordered pairs of numbers from the replacement sets of variables for which the sentence is true.
2. Know that the set of all points in a Cartesian plane associated with ordered pairs of numbers in the solution set of an open sentence in two variables is called the graph of the solution set or the graph of the open sentence.
3. Define a function.
4. A polynomial function of degree one is called a linear function.
5. Know that the graph of every equation equivalent to the form $ax + by + c = 0$, where a, b, and c are constants and a and b are not both zero, is a straight line.
6. Know that the point-slope form of the equation of a line is $y - y_1, = m(x - x_1)$, where the point (x_1, y_1) is contained in the line and "m" is the slope.
7. Know that the slope-intercept form of the equation of a line is $y = mx + b$, where "m" is the slope and $(0, b)$ is the y-intercept.
8. Know that non-vertical parallel lines have the same slope and different y-intercepts.
9. Know that non-vertical lines which coincide have the same slope and the same y-intercept.

10. Know that in the Cartesian Coordinate System, two lines, neither of which is parallel to a coordinate axis, are perpendicular if and only if the product of their slopes is negative one.

11. Solve systems of simple linear equations and inequalities by algebraic and graphical methods.

12. Find the slope of a line, the midpoint of the line segment, and the distance between two given points.

STANDARD 2	The students will demonstrate knowledge of polynomials.

OBJECTIVES

1. Multiply and factor quadratic polynomials by use of special products.

2. Multiply and factor selected higher degree polynomials by use of special products.

3. Know that factoring a polynomial over a set is complete when each factor is either a constant or a prime.

4. Find the greatest common factor of two and three polynomials.

5. Find the least common multiple of two and three polynomials.

6. Know that the absolute value of x, denoted by $|x|$, equals x if $x \geq 0$, and $-x$ if $x < 0$.

7. Know that a polynomial equals zero if and only if at least one of its factors equals zero.

8. Divide polynomial and express the result as a quotient with a remainder where the degree of the remainder is less than the degree of the diviser.

9. Use synthetic division to simplify the division of a polynomial by a divisor of the form $(x - r)$, when $x \neq r$.

STANDARD 3	The students will demonstrate knowledge of exponents and radicals.

FIELD TRIAL

OBJECTIVES

1. Know that if n is a positive integer and if a, b, $\sqrt[n]{a}$, and $\sqrt[n]{b}$ denote real numbers, then ($\sqrt[n]{a}$) ($\sqrt[n]{b}$ = $\sqrt[n]{ab}$ and $\sqrt[n]{a/b}$ = $\sqrt[n]{a}$ / $\sqrt[n]{b}$, $b \neq 0$.

2. Know and use the laws of exponents; for all rational numbers a, b, x, and y.

$$(a^x)\ (a^y) = a^{(x + y)}$$

$$\frac{a^x}{a^y} = a^{(x-y)} \quad a \neq 0$$

$$(a^x)^y = a^{xy}$$

$$(a^x)\ (b^x) = (ab)^x$$

$$\frac{a^x}{b^x} = \frac{a}{b}^x \quad b \neq 0$$

$$a^0 = 1 \qquad a \neq 0$$

$$a^{-x} = \frac{1}{a^x} = \quad a \neq 0$$

$$a^{\frac{x}{y}} = \sqrt[y]{a^x} = (\sqrt[y]{a})^x$$

3. Know that the symbol $\sqrt[n]{b}$, called a radical, designates the principal nth root of b.

4. Simplify simple radical and exponential expressions.

5. Solve simple radical and exponential equations.

6. Know that raising each member of a radical equation to a power may result in an equation which is not equivalent to the original (i.e., extraneous roots may be introduced.).

STANDARD 4	The students will demonstrate knowledge of rational expressions simple complex fractions, and fractional equations.

OBJECTIVES

1. Know that an expression whose numerator and non-zero denominator are polynomials is called a rational algebraic expression.

2. Add, subtract, multiply, and divide rational algebraic expressions.

3. Know that a rational algebraic expression is reduced to lowest terms when the greatest common factor of the numerator and the denominator is 1.

4. Know that a complex algebraic fraction is a fraction whose numerator or denominator or both are rational expressions, or contain powers involving negative exponents.

5. Simplify complex algebraic fractions.

6. Know that an equation in which a variable appears in the denominator of a fraction is called a fractional equation.

7. Solve fractional equations.

8. Solve simple word problems containing rational expressions.

STANDARD 5	The students will demonstrate knowledge of quadratic expressions and equations.

OBJECTIVES

1. Define a quadratic polynomial.

2. Use factoring techniques and the quadratic formula to solve quadratic equations.

3. Use the complex number system to provide solutions for quadratic equations.

4. Solve systems of simple quadratic equations containing no more than "N" equations involving "N" variables ($N \leq 3$).

5. Solve simple word problems involving quadratic expressions.

STANDARD 6	The students will demonstrate understanding of complex numbers.

OBJECTIVES

1. Define the set of complex numbers.

2. Know that the sentence $x^2 = k$ has a solution set in the set of complex numbers.

3. Know that if "n" is even and $b < 0$, no meaning is assigned to the symbol $\sqrt[n]{b}$ in the system of real numbers.

4. Perform the operations of addition, subtraction, and multiplication on complex numbers.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Advanced Algebra	1	Mastery of Intermediate Algebra and Geometry

COURSE DESCRIPTION

Advanced algebra is an extension of intermediate algebra and an introduction to the binomial expansion theorem, probability, matrices, determinants, progressions, the theory of equations, complex numbers, and inequalities.

STANDARD 1	The students will demonstrate knowledge of a mathematical system.

OBJECTIVES

1. Define the complement of a set.
2. Define the set of complex numbers.
3. Define the Trichotomy Principle.
4. Know that if unequals are added to unequals in the same sense, the results are unequal in the same sense.
5. Know that if a, b, c, and d are positive and $a > b$ and $c > d$, then $ac > bd$.
6. Know that the absolute value of the product of "a" and "b" is the absolute value of "a" multiplied by the absolute value of "b."

STANDARD 2	The students will demonstrate knowledge of algebraic functions and equations.

OBJECTIVES

1. Define the absolute value of x as $|x| = \begin{cases} x \text{ if } x \geq 0 \\ -x \text{ if } x < 0 \end{cases}$
2. Know that if a polynomial $F(x)$ is divided by $(x - r)$, then the remainder $R = F(r)$.

3. Know that $(x - r)$ is a factor of $F(x)$, if and only if, r is a root of the equation $F(x) = 0$.

4. Know that every polynomial $F(x)$ of degree "n" is the product of "n" linear factors over the set of complex numbers.

5. Know that every polynomial equation of degree "n" $(n \geq 1)$ has exactly "n" roots in the set of complex numbers provided a root of multiplicity "k" is counted as "k" roots.

6. Know that every polynomial equation of "odd" degree with real coefficients has at least one real root.

7. Solve polynomial equations of degree three or less.

8. Know that complex roots appear as conjugate pairs in polynomial equations with rational coefficients.

9. Know that a polynomial can be expressed as a unique product of factors.

10. Solve polynomial equations using the fact that if all the coefficients of a polynomial equation are integers and if "p/q" is a rational root, reduced to lowest terms, then the numerator "p" must be a factor of the constant term, and the denominator "q" must be a factor of the leading coefficient.

11. Know and use synthetic division to find roots of any polynomial equation with rational coefficients.

12. Solve systems of linear equations containing no more than "N" equations involving "N" variables $(N \leq 3)$.

STANDARD 3	The students will demonstrate knowledge of matrices and determinants.

OBJECTIVES

1. Define a matrix.

2. Use matrices to solve systems of linear equations containing exactly two equations in two variables.

3. Know that the determinant of a square matrix is a real number.

4. Use determinants to solve systems of linear equations containing exactly two equations in two variables.

STANDARD 4	The students will demonstrate knowledge of progression.

OBJECTIVES

1. Define an arithmetic progression.
2. Calculate the terms and sum of an arithmetic progression by formula.
3. Define a geometric progression.
4. Calculate the terms and sum of a geometric progression by formula.

STANDARD 5	The students will demonstrate knowledge of complex numbers.

OBJECTIVES

1. Define equality of complex numbers.
2. Perform the operations of addition, subtraction, multiplication, and division on complex numbers.
3. Solve quadratic equations involving complex roots.

STANDARD 6	The students will demonstrate knowledge of functions and relations.

OBJECTIVES

1. Define a relation.
2. Define a function.
3. Know and use functional notation.
4. Define odd and even functions.
5. Solve word problems.

STANDARD 7	The students will demonstrate knowledge of logarithmic and exponential functions.

OBJECTIVES

1. Define a radical.
2. Define an exponential function.
3. Define a logarithmic function.
4. Know that a logarithmic function is the inverse of an exponential function.
5. Know that logarithms of base ten are called common logarithms.
6. Know that logarithms of base "e" are called natural logarithms.
7. Solve simple logarithmic and exponential equations involving one variable.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Trigonometry	.5	Mastery of Geometry and Intermediate Algebra

COURSE DESCRIPTIONS

Trigonometry is a course designed to study circular and trigonometric functions, their graphs and associated inverses, trigonometric equations, the solution of triangles, and complex numbers.

The use of calculators and/or computers is considered an integral part of this course.

STANDARD 1	The students will demonstrate knowledge of the circular functions, trigonometric functions and their basic properties; and knowledge of the function values of special angles.

OBJECTIVES

1. Define circular functions on the unit circle.
2. Identify the domain and range of trigonometric and circular functions.
3. Calculate the measure of angles in degrees, minutes, and in radians.
4. Convert between radian measure and degree measure.
5. Know in simplest radical form the function values of the special angles (0°, 30°, 45°, 60°, 90°, and their multiples to 360°; 0, $\pi/6$, $\pi/4$, $\pi/3$, $\pi/2$, and their multiples to 2π).
6. Define trigonometric functions: sine, cosine, tangent, cotangent, secant, cosecant.
7. Verify as identities simple statements involving sine and cosine.
8. Define periodic functions.
9. Know that trigonometric functions are periodic functions.

STANDARD 2

The students will demonstrate knowledge of the inverses of the sine, cosine and tangent functions and the solution of trigonometric equations involving these functions.

OBJECTIVES

1. Solve trigonometric equations of degree two or less involving sine, cosine, and tangent.
2. Define the inverses of the trigonometry functions.
3. Define the principal values of the inverses of the sine, cosine, and tangent functions.

STANDARD 3

The students will demonstrate the ability to graph the sine, cosine, tangent functions, and their inverses using amplitude and period.

OBJECTIVES

1. Graph the sine, cosine, and tangent functions.
2. Graph the inverses of the sine, cosine, and tangent functions.
3. Define and graph odd and even functions.
4. Graph trigonometry functions using the amplitude and period.

STANDARD 4

The students will demonstrate knowledge of the solution(s) to triangles and problems involving circular motion.

OBJECTIVES

1. Use circular functions to describe circular and simple harmonic motion.
2. Define and use radian measure.

3. Determine arc length by formula.

4. Solve triangles including the use of the laws of sines, and cosines.

5. Solve word problems involving trigonometric functions.

STANDARD 5	The students will demonstrate knowledge of complex numbers.

OBJECTIVES

1. Define equality of complex numbers as "two complex numbers are equal if and only if the real parts are equal and the imaginary parts are equal."

2. Perform the basic operations of addition, subtraction, multiplication, and division on complex numbers.

3. Express complex numbers in polar form.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Analytic Geometry	.5	Mastery of Advanced Algebra and Trigonometry

COURSE DESCRIPTION

Analytic geometry is a course designed to provide a study of the algebraic and geometric relationships of lines, planes, conics; the general quadratic equation in two variables; the relationship between cartesian and polar coordinates; vectors; and the sketching of algebraic curves. The use of calculators and/or computers is considered an integral part of this course.

STANDARD 1

The students will demonstrate knowledge of functions.

OBJECTIVES

1. Define an even function.
2. Define an odd function.
3. Define symmetry with respect to the origin.
4. Establish and use the relationship between polar coordinates and cartesian coordinates.

STANDARD 2

The students will demonstrate knowledge of lines, planes, and their relationships.

OBJECTIVES

1. Compute the distance between two points using the distance formula.
2. Define the slope of a line.
3. Determine the equation of a line.
4. Determine the distance from a point to a line.

STANDARD 3

The students will demonstrate knowledge of conic sections.

OBJECTIVES

1. Define conic section.
2. Define and use eccentricity to determine whether the conic is a circle ($e = 0$), ellipse ($0 < e < 1$), parabola ($e = 1$), or hyperbola ($e > 1$).
3. Know the standard equation of a circle having its center at (h, k).
4. Know the standard equations of parabola having its vertex at (h, k).
5. Know the standard equations of an ellipse having its center at (h, K).
6. Know the standard equations of an hyperbola having its center at (h, K).
7. Determine the type of conic, using the value of either the discriminant or variant.

STANDARD 4

The students will demonstrate ability to sketch conic sections.

OBJECTIVES

1. Define an asymptote.
2. Define translation of axes.
3. Define rotation of axes.
4. Sketch conic sections from the standard equations.
5. Simplify the general quadratic equation in two variables to one of the standard conic forms through translation and/or rotation, and sketch the resulting equations.
6. Sketch algebraic curves, including the use of vertical, horizontal, and oblique asymptotes, symmetry, intercepts, and the graphing of selected points.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Calculus	1	Mastery of Advanced Algebra and Trigonometry (Mastery of Analytical Geometry recommended.)

COURSE DESCRIPTION

A course in calculus consists of a full academic year of work in calculus and related topics comparable to courses in colleges and universities. The course description for Advanced Placement Mathematics--Calculus AB or Calculus BC--should be consulted to provide the teacher with a guide to the topics and concepts which should be included in the high school calculus course. The Advanced Placement Guide should be the guide, and the teacher is responsible to expand the course to include applications and enrichment.

Analytic geometry may be combined with the calculus course or may be taught as a separate course. If analytic geometry is combined with calculus, three semesters may be required to complete the course.

Copies of the Advanced Placement Course Description in Mathematics for the current year may be obtained from:

College Board Publication Orders
Box 2815
Princeton, New Jersey 08540

STANDARD 1

The students will demonstrate by successful completion of an evaluation process his/her level of understanding of the concepts outlined in the Advanced Placement Guide.

OBJECTIVE

1. Demonstrate knowledge of objectives as outlined in the Advanced Placement Guide for Calculus.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Mathematics In Living	1	Mastery through Level 6

COURSE DESCRIPTION

This a course will apply the fundamentals of mathematics in solving life problems related to shelter, nutrition, transportation, leisure, personal services, retirement, income, budgeting, savings, checking, charging, credit cards, taxation, and insurance.

STANDARD 1	The students will demonstrate the ability to use mathematics to solve problems related to providing shelter for self and family.

OBJECTIVES

1. Compare the costs of renting and owning apartments, condominiums, and homes.
2. Make a chart to compare the costs of utilities for an apartment, condominium, and home.
3. Compare maintenance costs of an apartment, condominium, and home.
4. Read meters to verify costs for water, gas, and electricity.
5. Use geometry to plan the landscaping for a home.
6. Determine probability of various processes to conserve energy.
7. Compare the costs of various mortgages.
8. Compare miscellaneous costs of providing shelter including insurance and garbage.

STANDARD 2	The students will demonstrate the ability to use mathematics to solve problems related to nutrition.

OBJECTIVES

1. Compare calories of various foods.

2. Compare costs of foods using costs per unit.
3. Use labels to compare various contents of similar foods.
4. Adjust recipes to appropriately prepare various quantities of food.
5. Compare the cost of eating out versus eating at home.
6. Compare the various nutritional values of food, vitamins, and supplements.

STANDARD 3	The students will demonstrate an understanding of mathematics by solving problems related to transportation including auto, bus, rail, air, taxi, and ship.

OBJECTIVES

1. Compare the costs of various modes of transportation for short and long distance travel.
2. Develop comparative charts for costs involved in automobile ownership.
3. Determine the differences between owning and leasing transportation.
4. Use maps, charts, and schedules to determine the best mode of transportation for a trip.

STANDARD 4	The students will use mathematics to demonstrate knowledge of appropriate use of leisure time.

OBJECTIVES

1. Compare the costs of health and leisure clubs.
2. Use maps, time, and travel schedules to plan a vacation.
3. Analyze the mathematics related to at least three hobbies.

4. Determine what mathematics is used in the Utah Fish and Game proclamations.

5. Use charts and graphs to compare the personal income used in recreation.

STANDARD 5

The students will use mathematics to demonstrate knowledge of the personal services available.

OBJECTIVES

1. Compare fee structures of doctors, lawyers, accountants, and real estate brokers.

2. Analyze the costs of at least three domestic services.

3. Chart the components of the costs for repair services.

STANDARD 6

The students will demonstrate knowledge of the implications of retirement related to mathematics.

OBJECTIVES

1. Compare the components of income before and after retirement.

2. Compare and analyze expenses before and after retirement.

3. Use charts to compare various retirement plans.

4. Use graphs to compare the necessities of shelter, nutrition, transportation, and leisure activities before and after retirement.

STANDARD 7

The students will demonstrate a knowledge of income, employee benefits, required deductions, optional deductions, and their relationship to the consumer price index and gross national product.

OBJECTIVES

1. Use charts to compare income from wages, salary, piece work and commissions.
2. Compare state and national minimum wage laws.
3. Compare various employee benefit programs.
4. Analyze the relationships between income, the gross national product, and the consumer price index.

STANDARD 8	The students will demonstrate knowledge of budgeting by using mathematics to prepare a personal budget.

OBJECTIVES

1. Develop charts to compare monthly income and expenses.
2. Prepare a personal budget sheet.

STANDARD 9	The students will demonstrate knowledge of various methods of financial savings by using mathematics to compare advantages of each.

OBJECTIVES

1. Use charts to compare savings in passbooks, certificates, stocks, and bonds.
2. Compare income from guaranteed yield investments and variable yield investments.
3. Compare simple interest, compound interest, and annual percentage rates (APR).

STANDARD 10	The students will demonstrate knowledge of financial transactions by mathematically comparing the use of checking accounts, credit cards, and charge accounts.

OBJECTIVES

1. Analyze finance charges.
2. Compare the various types of loan and finance charges related to each.
3. Maintain a check ledger.
4. Reconcile a bank statement.
5. Compare purchase costs using cash, check, credit card, and charge accounts.

STANDARD 11	The students will demonstrate a knowledge of taxation by using mathematics to explain sales tax, personal income tax, utility tax, property tax, and miscellaneous taxes.

OBJECTIVES

1. Determine the sales tax on selected purchases.
2. Complete a personal state and federal income tax annual report.
3. Compare taxes on various utilities.
4. Use charts to compare the property taxes in selected taxing units.
5. Identify other miscellaneous taxes and their rates.

STANDARD 12

The students will demonstrate knowledge of selected insurance programs through mathematical comparisons related to benefits.

OBJECTIVES

1. Compare the costs and benefits of selected life insurances.
2. Compare the costs and benefits of selected accident insurances.
3. Analyze the costs and benefits of selected health insurances.
4. Compare the costs and benefits of selected automobile insurances.
5. Compare the costs and benefits of selected homeowner insurances.
6. Compare the costs and benefits of selected guaranteed income insurances.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Mathematics in Careers	1	Mastery through Level 6

COURSE DESCRIPTION

This course will provide the student with a working knowledge of basic operations on whole numbers, fractions, mixed numbers, decimals, percent, ratio, proportion, formulas involving rational expressions, and students will solve problems related to various career clusters. For selected careers that require albegra and geometry, there will be an introduction to those courses. Students selecting such careers will be encouraged to enroll in algebra and/or geometry. As the mathematical maturity of the students increases during the transition to mastery learning, the mathematics to be explored in the career clusters will be appropriately adjusted. Use of a calculator and/or computer is considered an integral part of the course.

STANDARD 1	The students will demonstrate knowledge of measurement in selected careers.

OBJECTIVES

1. Use measuring devices such as rulers, tapes, protractors, gauges, meters (including those with nonlinear scales).
2. Compute areas and volumes.
3. Compare fractions and decimals.
4. Estimate to determine whether computed results are reasonable.

STANDARD 2	The students will demonstrate knowledge of tables and graphic material related to selected careers.

OBJECTIVES

1. Read and interpret tables and charts (such as mileage, tax, and postage).
2. Read and interpret graphs (such as bar, broken-line, circle, pictograph).

STANDARD 3	The students will demonstrate knowledge of ratio, proportion, and percent found in selected careers.

OBJECTIVES

1. Compute discounts and markups.
2. Solve problems involving percent of increase and decrease.
3. Use simple formulas to solve practical problems.
4. Use ratio and proportion for determining dimensions of similar figures and for determining ratios of their areas and volumes.
5. Use ratio and proportion to solve problems (such as gear ratios, recipes, work problems).

STANDARD 4	The students will demonstrate problem solving ability as related to selected careers.

OBJECTIVES

1. Solve problems whose descriptions contain such terms as mean (average), mode, and median.
2. Use formulas to solve simple problems involving right triangles.
3. Use formulas to solve simple and compound interest problems.
4. Determine money amounts in transactions (change, totalling bills, calculating tips, cash register use, etc.).
5. Determine costs (such as unit costs; total costs for lists of materials; scaled costs for recipes, budgets, financing; credit costs compared to cash costs; etc.).

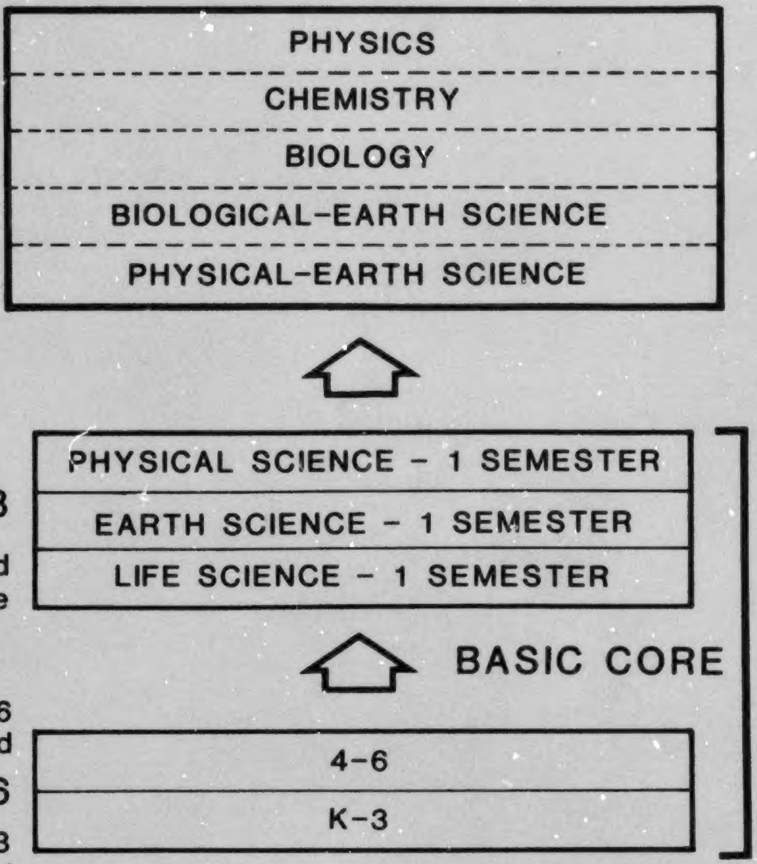
Section C

SCIENCE

RECOMMENDED

SCIENCE COURSE CHART

FIELD TRIAL



CORE OPTIONS

2 Units Required
(1 in biological and
1 in physical science)
From These Core Options

PHYSICS
CHEMISTRY
BIOLOGY
BIOLOGICAL-EARTH SCIENCE
PHYSICAL-EARTH SCIENCE

7-8

These 1.5 Units Required
in the 7-8 Basic Core

PHYSICAL SCIENCE - 1 SEMESTER
EARTH SCIENCE - 1 SEMESTER
LIFE SCIENCE - 1 SEMESTER

BASIC CORE

Mastery of the 4-6
Basic Core Required

K-6

Mastery of the K-3
Basic Core Required

4-6
K-3

FIELD TRIAL

CORE CURRICULUM FOR SCIENCE EDUCATION

K-3

COURSE DESCRIPTION

The student's learning experiences in science in Levels K-3 are derived from their spontaneous interest in exploring their immediate environment. Real or contrived, the environment must be one that interests them and one in which they are active participants. Learning experiences are drawn about equally from the areas of living things, matter and energy, and earth and the universe. Students, using their five senses, investigate some observable characteristics of plants and animals, seasonal changes, night and day, sounds, weather, magnets, shadows, rocks, landforms, friction, gravity, states of matter, heat, and static electricity. By the end of Level 3, most of the students will demonstrate the ability to use the basic process skills of observing, classifying, using numbers, measuring, using space/time relationships, inferring, recognizing variables, predicting, and communicating.

LEVEL K

STANDARD 1	The students will use the five senses to gather and compare information about their natural environment.

OBJECTIVES

1. Determine the shape, size, and texture of a common object (e.g., ruler--rectangle; nesting blocks--large, small; sandpaper--rough; cotton--soft).

2. Compare the color, shape, size, texture, and location of common objects (e.g., tooth--white; peak of house--triangle; tree--large; leaf--smooth; mountain--far).

3. Identify and distinguish some common sweet, sour, salty, and bitter foods (e.g., marshmallow--sweet; lemon--sour; pretzel--salty; bitter chocolate or whole cloves--bitter).

4. Recognize some common scents and odors (e.g., pine needles, perfume, cinnamon stick, onion).

5. Name some common objects that make sounds the students can hear (e.g., telephone, whistle, vacuum).

6. Infer which sense or senses are used to make an observation (e.g., fingers--touch; eyes--sight; nose--smell; tongue--taste; ears--hear).

FIELD TRIAL

STANDARD 2	The students will categorize animals according to similarities and differences.

OBJECTIVES

1. Conclude that there are many different kinds of animals.
2. Compare how animals differ in size, shape, and color.
3. Recognize different body coverings of animals (e.g., fur, shell, feathers, hair).
4. Show how animals move (e.g., snails--crawl; sea gulls--fly; kangaroos--jump).
5. Distinguish likenesses and differences between young animals and their parents.
6. Group animals as pets, farm animals, and wild animals.
7. Group animals according to their feelings toward them.

STANDARD 3	The students will observe and describe variations in plants.

OBJECTIVES

1. Recognize different kinds of plants (e.g., grass, bushes, flowers, trees).
2. Observe that different plants grow at different rates.
3. Show that some plants have seeds.
4. Discover that a seed is a living thing and can grow into a plant.
5. Demonstrate that plants have many parts: some parts grow above the ground and some underground.

STANDARD 4	The students will recognize sounds and the sources of those sounds.

OBJECTIVES

1. Identify sounds in the environment (e.g., water running, door closing, bell ringing).
2. Compare sounds (e.g., longer-shorter; louder-softer; higher-lower).
3. Distinguish various sounds produced by objects (e.g., rocks in a can, tambourine, rhythm sticks).

STANDARD 5

The students will use magnets and identify objects that are affected by magnets.

OBJECTIVES

1. Use magnets and describe what they look and feel like.
2. Find objects that are attracted by a magnet and objects that are not.

STANDARD 6

The students will observe and describe some basic components of weather.

OBJECTIVES

1. Compare the characteristics of sunny days, rainy days, cloudy days, windy days, snowy days, and foggy days, or a combination of these.
2. Recognize that clouds affect the weather and have different shapes.
3. Discover that the sun warms the earth, air, and objects and helps determine the weather.
4. Demonstrate that wind is moving air.

STANDARD 7	The students will describe and compare seasonal changes in plants, animals, and people.

OBJECTIVE

1. Identify some characteristics of each season.
2. Investigate how trees and other plants look during the different seasons.
3. Compare and contrast the habits and activities of animals and people during the different seasons.

LEVEL I

STANDARD 1

The students will use their five senses to perceive and organize objects and events.

OBJECTIVES

1. Classify (group) objects by size, color, and shape.
2. Put in order a collection of at least three like objects according to size or weight (e.g., shortest to tallest, lightest to heaviest).
3. Identify the sources of different sounds, odors, tastes, and kinds of light.
4. Compare and describe different kinds of textures.
5. Show that people need light in order to see.
6. Identify the eyes, ears, nose, tongue, and skin as parts of the body that can detect particular sensations.

STANDARD 2

The students will group animals according to their physical characteristics and identify the basic needs of animals.

OBJECTIVES

1. Investigate a variety of animals and discuss some likenesses and differences among them.
2. Group animals as those that hatch and those that are born alive.
3. Identify and name some common animals and describe the places where these animals live.
4. Infer why different animals live where they do.
5. Infer that all animals need food, air, water, and shelter.
6. Recognize that animals need proper care and handling.

STANDARD 3

The students will describe and group plants in their immediate environment; categorize plant parts; and identify plants as living organisms.

OBJECTIVES

1. Describe similarities and differences in local plants.
2. Group plants by various criteria--size, shape, location, texture of leaf or bark, etc.
3. Identify leaves, roots, stems, and flowers as being common to most plants.
4. Identify plants as living organisms.

STANDARD 4

The students will compare the three forms of matter and cite examples of matter changing from one form to another.

OBJECTIVES

1. Identify materials in the environment as solids, liquids, or gases.
2. Describe similarities and differences among the three states (forms) of matter.
3. Observe that the form of objects can be changed (e.g., water to ice, batter to cake, clay ball to clay rope, sugar to sugar water).
4. Investigate and infer what happens over several hours to water in a sponge, towel, or shallow pan.

STANDARD 5

The students will identify characteristics of water and its uses.

OBJECTIVES

1. Investigate water as a solid (ice), liquid, and gas (water vapor).
2. Demonstrate that some common materials dissolve in water and some do not.
3. Discover some common objects that float in water and some that sink in water.
4. Describe ways that people have fun with water.
5. Infer that water is a limited resource and should not be wasted.

STANDARD 6	The students will identify characteristics of air and its uses.

OBJECTIVES

1. Observe air directly with the sense of touch and indirectly with the senses of sight, hearing, and smell.
2. Conclude that air is all around them, has weight, and takes up space.
3. Discover that air can make objects move.
4. Identify ways that people use air.
5. Infer that all plants and animals need air to stay alive.

STANDARD 7	The students will recognize and interpret different sounds and identify how they are produced.

OBJECTIVES

1. Identify some sounds in the school or community and describe how they are produced.
2. Demonstrate several ways that sounds can be produced.

3. Discover how a tuning fork makes a sound.

4. Interpret the meaning of various sounds (i.e, siren, laughter, crying).

STANDARD 8

The students will identify sources of energy and describe ways to conserve energy.

OBJECTIVES

1. Observe the wind as a source of energy (e.g., sail boats, windmills).

2. Investigate coal and wood as sources of energy (e.g., fireplaces, furnaces, campfires).

3. Recognize gasoline as a source of energy (e.g., cars, trucks, lawnmowers).

4. Discuss food as a source of energy (e.g., hamburgers for people, hay for cows).

5. Identify the sun and water as sources of energy (e.g., heat, light, movement).

6. Describe ways to conserve energy (e.g., turning off lights, televisions, and radios not in use; closing doors in heated and air conditioned buildings; recycling aluminum cans).

STANDARD 9

The students will describe and record weather related information and suggest appropriate activities for different kinds of weather.

OBJECTIVES

1. Describe different kinds of weather.

2. Observe, describe, and record the weather on a given day(s).

3. Distinguish between two very different temperatures with and without the aid of a thermometer.

4. Describe appropriate activities and clothing for different kinds of weather.

STANDARD 10

The students will identify time categories, name and sequence the four seasons, and describe seasonal changes.

OBJECTIVES

1. Classify what they might do according to time categories such as morning, noon, or night, day of the week, or season of the year.
2. Name each season and identify its typical characteristics.
3. Place in proper order the seasons of the year.
4. Observe and describe changes in the local seasons.
5. Conclude that seasons vary in temperature, length of day, and effect on plant and animal life.

LEVEL 2

STANDARD 1

The students will discover that animals differ in many ways.

OBJECTIVES

1. Describe some different kinds of animals and their young found in the student's environment.
2. Identify some baby animals and speculate as to what changes will take place as these animals grow.
3. Infer how animals care for their young.
4. Discover what materials different kinds of birds use in making their nests and describe how they build them.
5. Conclude that life is a cycle which includes birth, growth, and death and that animals are capable of different activities at different stages in their life cycles.

STANDARD 2

The students will observe and experiment with plant seeds.

OBJECTIVES

1. Demonstrate that many plants grow from seeds.
2. Discover that seeds differ in size, color, shape, texture, and outer covering.
3. Find out what is inside a seed.
4. Determine conditions needed for seeds to sprout (e.g., warmth, moisture, air) and record observations about changes that take place in a seed as it sprouts.
5. Show by example that some plants produce seeds inside their fruit and some produce seeds outside their fruit.
6. Investigate variations in the ways that plants produce and disperse seeds.
7. Recognize that seeds develop into the same kind of plant that the seed came from.

STANDARD 3

The students will investigate cause-effect relationships between various light sources and shadows.

OBJECTIVES

1. Identify light sources (e.g., sun, light bulbs, fire, stars).
2. Show that when an object blocks the path of light, a shadow of the object is formed.
3. Recognize common objects by their shadows.
4. Change the size and shape of a shadow by moving the object that cast it.
5. Infer the sun's position from an object and its shadow.
6. Demonstrate that darkness is the absence of light.

STANDARD 4

The students will demonstrate principles of sound production and transmission.

OBJECTIVES

1. Demonstrate that sound is produced when materials vibrate (i.e., rubber band, guitar string, tuning fork, drum, tambourine, etc.).
2. Demonstrate that the faster an object vibrates, the higher the pitch of the sound produced.
3. Explain that sound requires something to carry it from one place to another and construct an investigation to determine whether a solid, such as wood, carries sound better than a gas, such as air.
4. Infer how sound is carried from place to place and describe some observations that can be used to test their inferences.

STANDARD 5

The students will demonstrate and describe some properties and uses of magnets.

OBJECTIVES

1. Discover, by experimenting, that magnets vary in strength.
2. Locate the poles on a bar magnet, a horseshoe magnet, and a disc magnet.
3. Identify some materials through which magnetism will pass.
4. Separate and describe objects that are attracted by magnets from those that are not.
5. List some uses of magnets.

STANDARD 6

The students will investigate and measure some observable properties of heat.

OBJECTIVES

1. Demonstrate that objects in the sunlight are warmer than the same objects placed in the shade.
2. Show that heat causes some things to melt.
3. Explain that the red line goes up or down because the liquid in the thermometer expands or contracts.
4. Determine the temperature of objects such as liquids, air, and solids by using a thermometer.
5. Devise an investigation to determine if some things (metal, for example) conduct heat more readily than other things (wood, for example).

STANDARD 7

The students will classify rocks on the basis of observable characteristics and identify where rocks are used in their community.

OBJECTIVES

1. Collect rocks and discover that they are found in many different places.
2. Identify rocks by observable characteristics (e.g., hard-soft, shiny-dull, smooth-rough, single color-multicolored, etc.).

3. Locate places in the community where rocks are used.
4. Select rocks that have crystals in them (granite, geodes, etc.) and describe the crystals.

STANDARD 8

The students will identify properties, sources, and uses of water and label the basic stages of the water cycle.

OBJECTIVES

1. Describe the importance of water in their daily lives.
2. Demonstrate that water can change from one form to another.
3. Discover that water evaporates and condenses.
4. Explain how water comes from the clouds in the form of rain, snow, sleet, and hail.
5. Label and discuss the basic stages of the water cycle.
6. Classify materials into two subsets: those that absorb water and those that do not.
7. Evaluate the importance of reservoirs and irrigation practices.

STANDARD 9

The students will identify the major components of soil, describe the importance of soil to life, and discuss how soil erosion occurs.

OBJECTIVES

1. Examine with a hand lens soil samples collected from several different places and describe what is in them.
2. Identify a soil sample on the basis of whether it is primarily made up of sand, silt, or clay.
3. Explain that soil provides the base and the minerals needed for plant growth and that all animals are directly dependent upon plants for food.

4. Demonstrate how running water and wind cause soil erosion.

5. Outline steps that can be taken to reduce soil erosion.

STANDARD 10	The students will identify the moon as a natural satellite, describe some of its characteristics, and show how natural satellites differ from man-made satellites.

OBJECTIVES

1. Identify and name the moon as a natural satellite of the earth and as the brightest object in the night sky.

2. Use a model to show that the moon is visible because it reflects light from the sun.

3. Conclude that it takes 24 hours for the earth to make one complete turn and four weeks for the moon to move around the earth once.

4. Infer why the moon looks bigger than the sun and the stars.

5. Identify one or more man-made satellites; tell how they are launched and what purpose they serve.

LEVEL 3

STANDARD 1

The students will compare different animal habitats and describe how animals behave in different ways to meet their life needs.

OBJECTIVES

1. Compare an artificial habitat in a zoo, farm, home, or school with the natural habitat of an animal.
2. Compare several kinds of animals to see how their methods of gathering food and finding shelter are different.
3. Explain how environmental factors (color, shading, cover) help an animal protect itself.
4. Recognize that some animals seem to have built-in "clocks" that tell them when to do certain things such as hibernate, migrate, or spawn. Investigate an animal that does each of these.
5. Differentiate between animals that are active during the day and those that are active during the night and determine reasons for the night-time activity of some animals.
6. Discover that many insects move about at night and are attracted by light.

STANDARD 2

The students will grow plants, group them, and identify characteristics that enable plants to live in a particular environment.

OBJECTIVES

1. Observe and record on a graph the growth of a plant.
2. Classify plants into sets and subsets of similar characteristics using leaves or flowers (e.g., first sort a group of flowers by size and then by color, or leaves by size and then by shape).
3. Compare and contrast the characteristics of the major plant groups (e.g., those with stems and those without).

4. Experiment with different parts of mature plants (roots, stems, leaves, flowers) to determine which parts will grow into new plants.

5. Explain the effects of seasons, the time of day, and amount of rainfall on plants.

6. Distinguish between evergreen and decidious trees.

STANDARD 3	The students will compare different environments, describe how living things are affected by their environment, and identify natural resources and how they are used.

OBJECTIVES

1. Observe and describe similarities and differences between various environments (e.g., home-school, city-country, zoo-jungle, water-land).

2. Describe the relationship among the organisms in a simple food chain.

3. Consider the effect on living things of these environmental factors: weather and climate; availability of food, water, and fuel; pollution; urbanization.

4. Discuss the interdependence between plants and animals.

5. Name some commonly used natural resources (e.g., soil, water, oil, trees).

6. Describe ways these natural resources are used and tell what they can do to conserve them.

STANDARD 4	The students will illustrate how matter can be categorized, weighed, changed, and smelled.

OBJECTIVES

1. Identify matter as anything that occupies space and has weight.

2. Construct a classification scheme for categorizing things that are matter and things that are not (such as heat, sound, light, electricity, etc.).
3. Weigh objects (matter) accurately on a balance (scales).
4. Demonstrate that matter can be either a solid, a liquid, or a gas and can change from one form to another.
5. Discover that some matter can be smelled even if it can't be seen or felt.
6. Observe and record changes in matter around them.

STANDARD 5

The students will demonstrate how static electricity can be produced, investigate its properties, and describe lightning as an example of static electricity.

OBJECTIVES

1. Demonstrate that static electricity can often be produced by rubbing two different kinds of material together.
2. Identify materials that are charged with static electricity by observing that they attract things such as nylon and cotton threads, dry hair, small bits of paper, etc.
3. Infer how things become electrically charged.
4. Demonstrate that some charged objects attract each other and other charged objects repel each other.
5. Explain what causes lightning and thunder.
6. Infer some safe places to be when there is lightning and some places to avoid.

STANDARD 6

The students will identify friction as a force, provide evidences of its presence, and describe how friction can be reduced or increased.

OBJECTIVES

1. Demonstrate that a force (either a push or a pull) is necessary to move things.

2. Discover through experimentation that friction is a force which can make things stop moving.

3. Illustrate and compare the different evidences of friction such as wear, warmth, difficulty in sliding, and scraping sounds.

4. Describe how friction is reduced by the use of bearings, rollers, and different lubricants.

5. Investigate whether rolling an object or sliding the same object produces greater friction.

6. Identify when an increase in friction is useful and when a decrease in friction is useful.

STANDARD 7

The students will identify landforms and determine the relationship between the earth's surface features and the forces that are constantly changing them.

OBJECTIVES

1. Discover that the earth's surface has a variety of land forms (e.g., mountains, deserts, plains, lakes, rivers, oceans).

2. Compare the place where they live to a pictured area which may show mountains, deserts, plains, lakes, rivers, etc.

3. Discuss different ways in which the earth's surface could be formed into mountains.

4. Identify factors that cause weathering and other forms of erosion to take place (e.g., wind, water, heat, freezing, growing plants).

5. Infer why the earth's surface has not been leveled.

STANDARD 8	The students will demonstrate the earth's motions in space, describe events that occur regularly because of those motions, and examine the effects of gravity.

OBJECTIVES

1. Use a globe as a representation of the earth and locate the north and south poles.
2. Demonstrate how the earth and everything on it turns (spins) in space and also revolves around the sun.
3. Discuss order in the universe (e.g., day follows night, night follows day; spring follows winter, summer follows spring; etc.).
4. Use the measurements of time (e.g., hour, day, week, month, year, calendar) and relate them to the earth's motions in space.
5. Discuss how the movements of the earth and moon cause the moon to appear in different shapes.
6. Classify objects of different weights by lifting and comparing them on an equal arm balance (or scale) to demonstrate that the pull of the earth's gravity can be felt and measured.
7. Infer what the earth would be like if there were no gravity.

STANDARD 9	The students will investigate the cause and effect of winds, determine wind direction, and infer its effect on the weather.

OBJECTIVES

1. Demonstrate that air moves and that it can be felt when it moves fast.
2. Construct a hypothesis about the cause of winds.
3. Determine the direction of the wind.
4. Infer some things about the weather by observing wind direction and the movement of clouds as they are blown across the sky.

FIELD TRIAL

4 - 6

COURSE DESCRIPTION

In the core program in Levels 4-6, the students draw learning experiences each year equally from the areas of living things, matter and energy, and earth and the universe. Students become increasingly familiar with plants and animals, weather phenomena, satellites, household chemicals, changes in the earth's surface, the sun and the planets, forces, forms of energy, properties of matter, and other observable phenomena as they progress through these levels. The student's learning activities in each of the levels are centered around concrete (hands-on) experiences with real objects and events. By the end of Level 6, most of the students will combine the basic process skills to perform the intergrated process skills of controlling variables, interpreting data, defining operationally, formulating hypotheses and models, and experimenting.

LEVEL 4

STANDARD 1	The students will identify characteristics of major groups of animals and classify them in different ways.

OBJECTIVES

1. Classify animals as those with backbones (mammals, birds, fish, etc.) or those without backbones (insects, worms, shellfish, etc.)
2. Define "characteristics" and describe an animal according to its characteristics.
3. Describe special adaptations (characteristics) of animals that can fly or those that live in water.
4. Construct a classification scheme to distinguish between carnivores, herbivores, and omnivores and recognize the characteristics each group has for getting food (i.e., form of teeth, mouth parts, feet, etc.)

STANDARD 2	The students will describe the basic parts of plants, their functions, and how plants are useful to man.

OBJECTIVES

1. Describe the important role of leaves in making food for green plants.
2. Formulate hypotheses to explain why many leaves change color during autumn.
3. Identify at least three functions of roots in plants.
4. Describe the functions of plant stems.
5. Explain how flowers produce seeds.
6. State several ways that plants are helpful to man.

STANDARD 3	The students will identify several ecosystems and their components, describe plant and animal interactions in those ecosystems, and summarize some conservation practices.

OBJECTIVES

1. Identify an ecosystem as one that belongs to a grassland, a forest, a desert, or a pond.
2. Describe some of the plants and animals within a selected ecosystem.
3. Infer how plants and animals in an ecosystem interact with each other.
4. Define the terms: competitor, green plant, and non-green plant.
5. Identify factors in the natural environment that can limit or change plant/animal populations.
6. Outline some plant and animal conservation practices.

STANDARD 4	The students will define, identify, and name materials as elements, compounds, and mixtures.

OBJECTIVES

1. Define the terms: element, compound, mixture.
2. Identify common elements (iron, aluminum, carbon, etc.).
3. Describe and identify mixtures (salt and pepper, sugar and water, iron filings and sand, oil and water, etc.).
4. Name several common compounds (table salt, sugar, water, baking soda, vinegar, etc.).

STANDARD 5	The students will produce different sounds, demonstrate what causes sound and how it travels, and identify problems created by noise.

OBJECTIVES

1. Create sounds using different objects.
2. Based on the observations from No. 1, construct a hypothesis that explains what causes sound.
3. Test the hypothesis developed in No. 2.
4. Demonstrate that sound travels through solids, liquids, and gases.
5. Explain that sound travels in waves that spread out in all directions.
6. Discuss some problems sound (noise) creates in our environment.

STANDARD 6	The students will demonstrate and describe some properties and functions of magnetism.

OBJECTIVES

1. Demonstrate that magnets have two poles.
2. Identify the north and south pole of a magnet.
3. Show that like poles repel each other and unlike poles attract each other.
4. Demonstrate that the magnetic field is always strongest at the poles of a magnet.
5. Create a "picture" of a magnetic field; e.g., place a piece of paper over a magnet and sprinkle iron filings on the paper.
6. Describe the function and properties of a magnetic compass.

STANDARD 7

The students will construct a simple circuit, identify conductors and insulators, and discuss how electricity is transmitted and used safely.

OBJECTIVES

1. Using a dry cell (battery), wires, and a bulb, construct a simple circuit, causing the bulb to light.
2. Describe characteristics of a simple circuit. What happens when a circuit is closed and what happens when a circuit is open?
3. Determine by experimentation several items that are conductors and several that are insulators.
4. Distinguish between static electricity and current electricity.
5. Describe where electricity for our homes comes from and how it gets to our homes.
6. Outline safe practices for the use of current electricity in and around the home.

STANDARD 8

The students will identify and group samples of the three classes of rocks, tell how each is formed, and perform tests to determine properties of rocks.

OBJECTIVES

1. Classify rock samples into three groups: igneous, sedimentary, or metamorphic.
2. Describe how rocks in each of the three groups were formed.
3. Use a rock "key" to identify rocks within the three major groups.
4. Determine the relative hardness of several rocks by performing a scratch test using a fingernail, a penny, a piece of broken glass, etc.
5. Identify rocks containing limestone (e.g., place a drop or two of vinegar on the rock; those that "fizz" contain limestone).
6. Make a collage illustrating uses of the three kinds of rocks.

STANDARD 9	The students will determine the origin and composition of soil, identify properties of soil, and discuss the importance of soil conservation.

OBJECTIVES

1. Describe what materials form soils.
2. Experiment to determine which kind of soil holds (retains) water best: humus, clay, or sandy.
3. Identify the variable that is manipulated (varied) in the experiment in No. 2. What variables are held constant?
4. Investigate factors that promote soil productivity.
5. Observe and record the differences between topsoil and subsoil.
6. Determine causes of soil erosion.
7. Describe methods of soil conservation.

STANDARD 10	The students will identify basic cloud formations, describe how precipitation is formed, record daily weather conditions, and discuss the role of satellites in predicting weather.

OBJECTIVES

1. Identify basic cloud types: cirrus, cumulus, and stratus.
2. Describe how precipitation is formed.
3. Observe, measure, and record daily weather conditions on a graph. Do this for temperature, pressure, wind direction, and amount of precipitation.
4. Make weather predictions based on data from the above graphs.
5. Interpret weather charts.
6. Explain how information from satellites is used to predict weather.

STANDARD 11

The students will identify the basic components of the solar system; describe their relative sizes, positions, and movement patterns; and infer why the gravitational forces vary so widely.

OBJECTIVES

1. Identify the relative sizes and the positions of the sun, planets, and moons. (Students should not be required to learn diameters, distances, and other specifics.)
2. Summarize the differences between stars and planets.
3. Describe some of the characteristics of the earth that are related to its position in the solar system (e.g., magnetic force, length of year, temperature, etc.).
4. Compare the earth's characteristics in No. 3 with those of the planets Mercury and Jupiter.
5. Explain that the objects in our solar system are in motion, that they rotate on their own axes, and that they revolve around the sun.
6. Identify two major factors that determine a planet's orbit.
7. Discover why the gravitational force on the different planets and moons varies so much.
8. Define natural and man-made satellites.

LEVEL 5

STANDARD 1	The students will identify and describe structural (anatomical) and behavioral adaptations in animals, propose reasons for the extinction of animal species, and summarize animal conservation practices.

OBJECTIVES

1. Identify examples of structural adaptations in animals (the beak and talons of an eagle, the trunk of an elephant, the teeth of a shark, the neck of a giraffe, etc.).
2. Describe some behavioral adaptations of animals (fawns remaining motionless when danger is near, a mother bear protecting her cubs, etc.).
3. Distinguish among hibernation, estivation, and migration and cite examples of animals that do each.
4. Infer the role of environmental changes in the extinction of animals.
5. Propose reasons for the appearance and then the extinction of dinosaurs.
6. Examine some of the current animal conservation practices and discuss their value.

STANDARD 2	The students will classify the major characteristics of plant parts, identify how plants can be reproduced, and describe structural adaptations exhibited by some plants.

OBJECTIVES

1. Classify plants as vascular or non-vascular.
2. Describe the relationship between flowers and seeds.
3. Distinguish between pollination and fertilization.
4. Identify the characteristics of a fruit and list several examples.

5. Demonstrate that some plants can be started from leaf and stem cuttings.

6. Explain the structural adaptations of cacti, water lilies, Venus fly traps, or other plants which help them to survive in their particular environments.

7. Describe some characteristics of deciduous and evergreen trees and distinguish between them.

STANDARD 3

The students will identify food chains, webs, and their importance, then classify organisms as producers, consumers, or decomposers.

OBJECTIVES

1. Identify and label a food chain.

2. Identify and label a food web.

3. Describe likenesses and differences in a food web and a food chain.

4. Identify the importance of decomposers in the environment.

5. Classify organisms as producers, consumers, or decomposers.

STANDARD 4

The students will give examples of the different states and forms of energy, identify different energy transformations, and discuss renewable and non-renewable energy resources.

OBJECTIVES

1. Distinguish between the two energy states--kinetic and potential.

2. Cite examples of kinetic energy and potential energy.

3. Identify different forms of energy (i.e., heat, light, electrical, mechanical, chemical, and nuclear).

4. Describe examples of energy being transformed from one form to another.

5. Trace the energy stored in foods, fuels, wind, and water power back to the sun.

6. Describe the uses and conservation of renewable and nonrenewable energy resources.

STANDARD 5	The students will summarize the characteristics of magnets, demonstrate the relationship between electricity and magnetism, and construct an electromagnet.

OBJECTIVES

1. Identify the characteristics of magnets.

2. Demonstrate that an electric current flowing along a wire has a magnetic field around it.

3. Distinguish between a permanent magnet and an electromagnet.

4. Construct an electromagnet.

5. Discuss how electromagnets are used.

STANDARD 6	The students will identify and compare the basic characteristics of light and describe images formed by different mirrors and lenses.

OBJECTIVES

1. Define the terms: opaque, transparent, translucent, and refraction.

2. Classify materials into one of three groups: opaque, transparent, or translucent.

3. Demonstrate differences between reflected and absorbed light.

4. Compare the speed of light to the speed of sound.

5. Use a concave and a convex lens to demonstrate how light is refracted (bent) as it passes through each lens.

6. Use a prism, or other means, to demonstrate that white light is a mixture of all colors.

7. Determine the order of colors in a spectrum or in a rainbow.

8. Use lenses and mirrors to obtain images of various objects.

9. Describe the images formed above.

10. Explain the use of mirrors and lenses in instruments such as eyeglasses, cameras, telescopes, and flashlights.

STANDARD 7

The students will describe geological features of the ocean floor, identify factors that affect the movement of water in the ocean, and discuss ways man has used and misused the ocean.

OBJECTIVES

1. Describe in general terms some geological characteristics of the ocean: continental shelf, slope, rise, and floor.

2. Identify water movement in the ocean including waves, tides, and currents.

3. List factors that affect the movement of ocean water, including wind, temperature, and gravitation.

4. Identify living and non-living products from the sea.

5. Describe ways in which people benefit from the ocean and ways in which they misuse it.

STANDARD 8

The students will demonstrate the movements of the earth, sun, and moon; describe how these movements cause night and day, changes in the seasons, different phases of the moon, and eclipses; and show how they are used to measure time.

OBJECTIVES

1. Define the terms: rotate, revolve, and orbit.

2. Demonstrate what motion of the earth causes night and day.

3. Describe how the length of the year on the earth is determined.
4. Describe how change in the position of the earth's orbit produces the four seasons.
5. Explain (or illustrate with a model) what causes the moon to appear in different phases (shapes) during each month.
6. Identify factors creating solar and lunar eclipses.

STANDARD 9

The students will compare the operational principles of jets, rockets, and satellites; identify uses of artificial satellites; and describe conditions that astronauts encounter in space.

OBJECTIVES

1. Distinguish between a jet engine and a rocket engine.
2. Cite examples of the "action-reaction" principle in everyday events.
3. Explain what keeps a satellite in orbit.
4. Compare natural and artificial satellites.
5. Discuss the role of satellites in obtaining information about the earth and space.
6. Define weightlessness.
7. Describe some conditions under which astronauts must work and some of the safety devices that are used to protect them.
8. State several reasons why astronauts must wear space suits when they are outside of the space capsule.

STANDARD 10

The students will identify the causes and effects of pollution, and methods of controlling pollution.

OBJECTIVES

1. Describe causes and effects of air, water, and land pollution.
2. Explain methods for controlling air, water, and land pollution.

LEVEL 6

STANDARD 1

The students will describe one-celled organisms; compare bacteria, viruses, and protozoans; and discuss ways some diseases are spread.

OBJECTIVES

1. Draw and label one-celled organisms: algae, yeast, protozoans.
2. Describe how algae is important to all organisms.
3. Identify the protozoans: amoeba, paramecia.
4. Identify uses of bacteria.
5. Differentiate among bacteria, viruses, and protozoans.
6. Examine ways in which some diseases are spread.

STANDARD 2

The students will identify and classify some common plants, summarize the function of plant parts in food making, describe photosynthesis, and distinguish between green and non-green plants.

OBJECTIVES

1. Identify and use the common name of several plants in their immediate environment.
2. Classify plants according to variations in a single characteristic (e.g., simple or compound leaf, smooth or rough bark, etc.).
3. Describe the function of leaves, roots, and stems in the process of food making by green plants.
4. Discuss the materials and conditions that are essential for photosynthesis to take place.
5. Explain the role of cholorophyll in making food in green plants.
6. Describe the process of growth of non-green plants such as fungi.

STANDARD 3

The students will observe, draw, and label the parts of plant and animals cells and recognize that all living organisms are made up of cells.

OBJECTIVES

1. Demonstrate how to properly focus and use a microscope.
2. Observe three different kinds of plant cells and draw pictures of them.
3. Observe three different kinds of animal cells and draw pictures of them.
4. Locate on a drawing or model of a plant cell the cell wall, cytoplasm, nucleus, and chloroplasts.
5. Cite evidence that all living organisms are made up of cells.
6. Discuss the cellular makeup of large plants, noting particularly the interdependence of the cells.

STANDARD 4

The students will infer that all solids, liquids and gases are made up of tiny particles called atoms and molecules, and that each atom and molecule is different from every other atom and molecule.

OBJECTIVES

1. Show the location of a proton, neutron, and electron in an atom.
2. Infer what the smallest particle of an element (copper or iron, for example) will be that still has the properties of that element.
3. Infer what the smallest particle of a compound (sugar or salt, for example) will be that still has the properties of that compound.
4. Formulate a hypothesis that can explain why odors can be smelled at some distance from the source of the odor.

6. Infer that the state of matter (solid, liguid, or gas) is dependent upon the distance between molecules.

STANDARD 5

The students will compare physical and chemical changes, demonstrate that a chemical reaction produces new substances, and classify materials on the basis of physical and chemical properties.

OBJECTIVES

1. Describe some common physical changes and give examples.
2. Describe some common chemical changes and give examples.
3. Demonstrate that chemical reactions produce new substances.
4. Classify materials on the basis of physical properties.
5. List some of the chemical properties of different materials.

STANDARD 6

The students will measure temperatures, infer a relationship between heat and the state of matter, demonstrate how heat travels, and distinguish between heat conductors and insulators.

OBJECTIVES

1. Read accurately thermometers calibrated in either the Fahrenheit or Celsius scale.
2. Construct a hypothesis to explain how gases may be changed to liquids and liquids changed to solids.
3. Infer that the state of matter depends upon the amount of heat energy a substance has in it.
4. Describe the heat energy exchanges that are necessary for (1) freezing and (2) melting to take place.
5. Explain the water cycle and how it helps to clean the earth's water.
6. Differentiate between heat conductors and insulators and their functions.
7. Compare conduction, convection, and radiation.
8. Demonstrate heat conduction.

9. Show that heat travels through liquids and gases by convection currents.

10. Infer how heat travels from the sun to the earth.

STANDARD 7

The students will identify and analyze the operational principles of simple machines to determine the amount of force required to lift or move objects in a specific direction.

OBJECTIVES

1. Identify from a selection of simple machines those that involve (1) an inclined plane, (2) a wedge, (3) a screw, (4) a wheel and axle, (5) a pulley, and (6) a lever.
2. Define the terms force, effort, load, and fulcrum.
3. Describe the operation of each of the six simple machines listed above in No. 1.
4. Construct an example of each of the three classes of levers.
5. Demonstrate that when the fulcrum is nearest to the load in a first-class lever, the effort is reduced.
6. Formulate a hypothesis about the force needed to move an object up a gentle incline versus a steep incline.
7. Compare the work done by two machines: the pulley and the inclined plane (e.g., using a spring scale and a block of wood, or other methods).

STANDARD 8	The students will measure factors that influence the weather and describe why these factors change, propose reasons for the movement of air masses, and forecast the weather.

OBJECTIVES

1. Use a barometer to measure air pressure accurately .
2. Develop a hypothesis to explain what causes air pressure and why air pressure changes.
3. Suggest possible reasons for the uneven heating of the earth's surface.
4. Identify factors that cause air masses to move.
5. Discuss the formation and movements of fronts.
6. Measure humidity.
7. Determine wind speed.
8. Describe the conditions that lead to the formation of dew or frost.
9. Make weather forecasts for each of several days using barometric pressure readings, wind speed and direction, temperature, and cloud formations.

STANDARD 9	The students will identify and describe the layers of the earth, geological eras, agents of change, and the formation and characteristics of fossils.

OBJECTIVES

1. Identify the crust, mantle, and core of the earth.
2. Identify and describe the geological eras: Precambrian, Paleozoic, Mesozoic, and Cenozoic.
3. Describe agents that change the earth (e.g., volcanoes, earthquakes, glaciers, erosion, and weathering).
4. Infer changes that may have produced fossils.

5. Classify types of fossils.
6. Investigate the sequence of life that fossils reveal.
7. Investigate methods for dating fossils.

STANDARD 10	The students will differentiate between rocks and minerals; identify, classify, and list uses of minerals; discuss fluorescence and radioactivity of some minerals.

OBJECTIVES

1. Explain the difference between rocks and minerals.
2. Classify the minerals in a variety of rocks on the basis of color, luster, and crystalline shape.
3. Use the streak test to identify several minerals.
4. Use Mho's hardness scale (1-10) to group a number of minerals.
5. Identify and classify minerals by using a key.
6. Discuss fluorescence and radioactivity as properties of some minerals.
7. List several ways that minerals are used.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Life Science	0.5	Mastery through Level 6

COURSE DESCRIPTION

The 0.5 unit life science course in the Level 7-8 core is a foundation course which emphasizes the broad perspective of life science rather than specific, theoretical details. The content of the course centers on life, its characteristics, and the relationships that take place among living things. Specifically, the students will use the science process skills to investigate observable properties of living things, interrelationships among them, how they reproduce, and why they live where they do. The course has a hands-on orientation in which students learn and use the basic life science laboratory skills.

STANDARD 1	The students will demonstrate a knowledge of scientific methods and conduct experiments in life science.

OBJECTIVES

1. List processes used in solving problems scientifically and identify ways to collect and record data.
2. Formulate a hypothesis in life science, based on observing life around them. Test the hypothesis.
3. Distinguish among observation, interpretation, and inference.
4. Manipulate variables in a controlled experiment.
5. Plot data on graphs or other displays.
6. Formulate conclusions from an experiment.
7. Write a scientific report of an experiment.

STANDARD 2	The students will demonstrate an understanding of the characteristic processes of life.

OBJECTIVES

1. Describe the processes characteristic of all life: reproduction, movement, assimilation, growth, response, and energy transformation.

2. Explain the differences between living and non-living things.

STANDARD 3

The students will draw, label, and interpret cell models.

OBJECTIVES

1. Draw plant and animal cells, note their differences and similarities, and label the cell parts.

2. Describe the functions of the following cell parts: nucleus, chromosomes, cell membrane, vacuole, mitochondria, cytoplasm, cell wall, and chloroplasts.

3. Prepare and observe microscopic slides of various living cells, i.e., cheek, onion, blood, etc.

4. Recognize that all cells reproduce by dividing.

5. Describe mitosis.

6. Explain the process of meiosis.

7. Recognize that all living things are made of cells.

8. Perform experiments demonstrating the processes of diffusion and osmosis.

STANDARD 4

The students will perform experiments and interpret data illustrating the processes of photosynthesis and cellular respiration.

OBJECTIVES

1. Describe photosynthesis in terms of the starting materials, the role of light, the role of chlorophyll, and the end products.

2. Perform experiments and interpret data illustrating the process of photosynthesis.

3. Explain the dependence of cellular respiration upon the process of photosynthesis.

4. Describe cellular respiration in terms of starting materials and end products.

5. Recognize that cellular respiration provides the energy needed for all life processes (e.g., growth, movement, reproduction, etc.).

STANDARD 5	The students will examine the effects of heredity upon organisms.

OBJECTIVES

1. Explain the differences between mitosis and meiosis in terms of the change in chromosome number at the end of each process.

2. Match terms and symbols used in genetics with their definition (e.g., genotype, phenotype, hybrid, XX, XY, chromosome, genes, traits, dominant, and recessive).

3. Predict offspring of monohybrid crosses using the Punnett square.

4. Identify organisms that have been bred to improve production or increase their economic importance.

5. Identify careers related to the science of genetics.

STANDARD 6	The students will recognize the basis for standard classification schemes and use them to group plants and animals.

OBJECTIVES

1. List in the proper sequence seven categories or levels used in classifying plants or animals.

2. Observe and compare major characteristics of five kingdoms.

3. Classify selected organisms into the proper kingdom according to their similarities or differences.

4. Identify plants as vascular or nonvascular, using diagrams and specimens.

5. Describe careers associated with the study of various groups of plants and animals.

STANDARD 7	The students will describe the theory of evolution as genetic change through time.

OBJECTIVES

1. Describe briefly the experiences of Darwin that led him to his theory of evolution.

2. Explain and give examples of natural selection, artificial selection, mutation, and adaptation.

STANDARD 8	The students will investigate the ecological relationships between living things and their environments.

OBJECTIVES

1. Illustrate the flow of energy and matter among organisms in food chains, webs, and pyramids through a variety of diagrams, models, and investigations.

2. Explain the relationships among organisms in a biological community by defining the roles (producer, consumer, and decomposer) of the organisms and their ecological niches within the habitat.

3. Name the components of the water, carbon, nitrogen, and oxygen cycles and explain the importance of each cycle.

4. Identify six major world biomes and examine relationships between abiotic and biotic factors in the biomes (e.g., desert, tropical rain forest, arctic, grassland, and taiga and temperate deciduous forest)

STANDARD 9	The students will investigate ways in which man's impact upon the environment affects living things.

OBJECTIVES

1. Explain how increases in the human population affect the environment.
2. Distinguish between renewable and non-renewable resources.
3. Give examples of extinct and endangered species of both plants and animals.
4. Discuss some conservation practices for wildlife.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Earth-Space	0.5	Mastery Through Level 6

COURSE DESCRIPTION

The 0.5 unit earth-space science course in the Level 7-8 core is a foundation course which emphasizes the broad perspective of earth-space science rather than specific, theoretical details. Students will increase their understanding of the principles of science that control the earth and the universe, the forces that produce the unending changes of the earth's surface, and the effective use of renewable and non-renewable resources. Specifically, the student will use the science process skills to investigate observable properties of rocks and minerals, forces of erosion, soil, landforms, weather, and astronomy. Learning activities are varied with an emphasis on student laboratory activities.

STANDARD 1	The students will identify rocks and classify them according to origin.

OBJECTIVES

1. Define: igneous, metamorphic, and sedimentary.
2. Communicate knowledge of the rock cycle through models, diagrams, or demonstrations.
3. Use a rock key to identify and classify rocks common to their area.
4. Identify characteristics and composition of common igneous rocks.
5. Identify characteristics and composition of common metamorphic rocks.
6. Identify characteristics and composition of common sedimentary rocks.
7. Describe common uses for rocks such as granite, pumice, sandstone, limestone, marble, and slate.

STANDARD 2	The students will identify the characteristics, composition, and use of common minerals.

OBJECTIVES

1. Define mineral and describe some characteristics of common minerals.
2. Use a mineral key to identify some common minerals.
3. Demonstrate the following properties of minerals: clevage, luster, streak, hardness, crystal structure, and specific gravity.
4. Identify the composition of common minerals.
5. Describe uses of common minerals.

STANDARD 3	The students will relate the process of weathering, erosion, and deposition to soil building and water movement.

OBJECTIVES

1. Distinguish among weathering, erosion, and deposition.
2. Differentiate between chemical and mechanical weathering. Cite examples of each.
3. Identify and describe the effects of erosion caused by: water, wind, glaciation.
4. Identify common types of deposition: deltas, moraines, and dunes. Describe characteristics of each.
5. Compare soil formation in terms of profiles and types.
6. Describe the effects of weathering, erosion, and deposition on rivers, streams, and lakes.

STANDARD 4

The students will use the plate tectonics theory and the effects of internal forces within the earth to explain the earth's surface features.

OBJECTIVES

1. Describe the theory of moving plates within the lithosphere.
2. Identify evidence that supports the existence of moving plates.
3. Explain the relationship between moving plates and earthquakes.
4. Identify the earth's layers and explain how earthquake shock waves travel through each layer.
5. Describe how moving plates can cause volcanic activity.
6. Infer how structural features such as mountains, plateaus, and faults may form.

STANDARD 5

The students will compare renewable and non-renewable types of energy sources.

OBJECTIVES

1. Identify sources of energy as being renewable or non-renewable.
2. Explain how fossil fuels, geothermal, wind, water, and nuclear energy sources result from natural earth processes.
3. Discuss the positive and negative aspects of using the energy sources in No. 2.
4. Communicate ways to conserve renewable and non-renewable energy sources.

STANDARD 6

The students will interpret the concept of superposition and describe the geologic eras, methods of fossilization, and methods of geologic dating.

OBJECTIVES

1. Explain why superposition is so important to historical geology.

2. Discuss major developments that occurred during the Precambrian, Palezoic, Mesozoic, and Cenozoic eras.

3. Describe the following methods of fossilization: ice, carbon, impression cast, mold, and mineral replacement.

4. Explain how radioactive dating is used to date geologic specimens.

STANDARD 7

The students will describe natural factors that determine weather and climates, interpret weather maps, and forecast short-range weather.

OBJECTIVES

1. Describe global air masses in terms of air pressure, wind patterns, temperature, and water content.

2. Discuss the origin and effects of cold fronts, warm fronts, stationary fronts, and occluded fronts.

3. Identify causes and effects of local and prevailing winds.

4. Describe how mountains and large bodies of water influence the weather and climate.

5. Explain how temperature, humidity, and barometric pressure influence the weather and the climate.

6. Obtain and interpret readings from weather instruments measuring temperature, humidity, wind velocity and direction, and barometric pressure.

7. Interpret symbols used on weather maps.

8. Forecast short-range weather for their general area using data they have gathered.

9. Identify causes and effects of human activity on the atmosphere and weather, e.g., the greenhouse effect, pollution, and albedo.

10. Describe ways to avoid dangers related to severe weather conditions.

FIELD TRIAL

STANDARD 8	The students will describe features common to all ocean basins and identify resources obtained from the ocean.

OBJECTIVES

1. Describe physical features common to all ocean basins.
2. Use the plate tectonics theory to interpret the origin of the physical features.
3. Describe the causes and effects of waves, tides, and ocean currents.
4. Identify several types of resources that are obtained from the ocean.

STANDARD 9	The students will describe the size and composition, motion, and measurements of solar components.

OBJECTIVES

1. Identify the relative size and position of stars, planets, solar systems, galaxies, meteroids, and comets.
2. Describe the magnetic properties of planets.
3. Discuss the orbits and periods of comets.
4. Compare the size of moons to the size of planets.
5. State Kepler's laws and interpret them.
6. Identify the conditions necessary for eclipses to occur.
7. Explain the causes and effects of rotation and revolution of bodies in the solar system.
8. Determine latitude and longitude of locations from a map or a globe.
9. Demonstrate what causes the seasons on earth.
10. Define declination.

STANDARD 10	The students will indicate major events in man's exploration of space and explain the important role the events have played in advancing technology.

OBJECTIVES

1. Discuss the development and importance of rockets, satellites, the space shuttle, and instruments to explore space.
2. Discuss innovations in areas such as radio astronomy, solar energy, medicine, communications, and materials development that have come from the space program.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Physical Science	0.5	Mastery through Level 6

COURSE DESCRIPTION

The 0.5 unit physical science course in the Level 7-8 core is a foundation course which emphasizes the broad perspective of physical science rather than specific, theoretical details. The course centers on some observable properties of matter and energy. Specifically, the student will use the science process skills to investigate the properties of matter; elements, compounds, and mixtures; physical and chemical changes; forces and work; heat; light; sound; and electricity. Students learn by applying course content to phenomena and events in the real world, not by the memorization of information. Learning activities are varied with an emphasis on student laboratory investigations.

STANDARD 1	The students will demonstrate a knowledge of scientific methods and will conduct experiments in physical science.

OBJECTIVES

1. List processes used in solving problems scientifically and identify ways to collect and record data.
2. Formulate and test a hypothesis in physical science.
3. Manipulate variables in a controlled experiment.
4. Plot data from their experiments on graphs, charts, or other displays.
5. Formulate conclusions based upon their experiments.
6. Write scientific reports of their experiments.
7. Distinguish among observation, interpretation, and inference.

STANDARD 2	The students will identify physical and chemical properties of matter.

OBJECTIVES

1. Distinguish between matter and energy.
2. Identify the states of matter and describe ways that matter can change from one state to another.
3. Demonstrate chemical properties of matter such as acidity, basicity, combustibility, and reactivity.
4. Compare physical properties of various substances, e.g., shape, density, solubility, odor, melting point, and boiling point.
5. Solve density problems.
6. Describe the characteristics and give examples of (a) elements, compounds, and mixtures; (b) acids, bases, and salts; (c) organic and inorganic substances.
7. Compare physical and chemical changes. Cite examples of each.
8. Distinguish between fission and fusion.
9. Describe how the law of conservation of matter and energy applies to chemical, physical, and nuclear reactions.

STANDARD 3

The students will make and explain various models that illustrate the structure of an atom.

OBJECTIVES

1. Represent by the Bohr and the cloud models the arrangements of electrons, protons, and neutrons in an atom.
2. Describe the electron, proton, and neutron in terms of their location in the atom, their charge, and their mass.
3. Illustrate how an element can become a positive ion. A negative ion. In each case, name the element and then the ion.
4. Define isotope and give examples.
5. Discuss the atomic theory of matter.

STANDARD 4	The students will use a periodic chart for obtaining information about elements and inferring about elements and binary compounds.

OBJECTIVES

1. Explain the structure of a periodic chart and the arrangement of the elements on it.
2. Describe the relationship of the elements within periods and families on a periodic chart.
3. Diagram and explain the Bohr representation of the atom for elements 1-18.
4. Using a periodic chart for reference (not memorization) list the symbol, atomic number, atomic weight, period, family (group), and valence of common elements and identify whether the element is a metal or a non-metal.
5. Infer, using a periodic chart, the chemical activity, physical properties, nature of bonding, and practical uses of common elements.
6. Characterize the change in chemical behavior of elements as they proceed from family to family on a periodic chart.
7. Predict accurately the formula of a binary compound formed between an element in group I and an element in Group VII. Between a group II and a group VI element.
8. Name correctly the binary compounds formed in No. 7.
9. Distinguish in general terms between ionic and covalent bonding.

STANDARD 5	The students will investigate the basic principles and technological applications of force, motion, work.

OBJECTIVES

1. Explain how mass and weight differ.
2. Describe the effect of gravity on stationary and on moving objects.

3. Demonstrate and explain Newton's three laws of motion.

4. Identify conditions when forces are balanced and when they are unbalanced.

5. Operate the following types of machines and demonstrate how they make work easier: lever, pulley, inclined plane, wedge, screw, wheel and axle.

6. Perform calculations using the equation work equals force times distance ($W = f \times d$) and use correct units for each quantity in the equation.

7. Distinguish between (a) speed and velocity, (b) velocity and acceleration.

8. Apply the principles of force and motion to powered vehicles, rockets, projectiles, and restraining devices.

STANDARD 6	The students will demonstrate and describe the fundamental properties of sound.

OBJECTIVES

1. Create longitudinal (compressional) and transverse waves and discuss their characteristics. Use springs or other methods to create the waves.

2. Describe how frequency of sound waves is related to musical sounds.

3. Demonstrate, using tuning forks, a piano, stretched strings, etc., volume, pitch, and quality of sounds.

4. Develop an investigation to test whether the speed of sound is the same in air, water, or solids.

5. Perform the experiment developed in No. 4.

6. Discuss what causes echoes.

7. Distinguish between music and noise.

8. Demonstrate and discuss the interference of sound waves.

9. Explain the term "decibel" and describe the effects on an individual as the decibel level rises.

10. Describe how sound is transmitted by telephone from their home to another destination.

STANDARD 7

The students will investigate the basic characteristics of light and its technological applications.

OBJECTIVES

1. Compare some characteristics of light waves to those of sound waves: relative speed, type of wave, medium required for travel.
2. Use a prism, a diffraction grating, etc., to produce a spectrum.
3. Explain what causes the colors to be dispersed.
4. Distinguish between colors in terms of wavelength and frequency.
5. Demonstrate and describe the images formed in (a) plane mirrors, (b) convex mirrors, (c) concave mirrors.
6. Use a ray diagram to show the path of light passing through (a) a convex lens and (b) a concave lens.
7. Compare the characteristics of real and virtual images.
8. Describe the use of lenses/mirrors in eyeglasses, cameras, microscopes, telescopes.
9. Identify the characteristics of light that make lasers possible.

STANDARD 8

The students will investigate the characteristics of heat and list some technological applications.

OBJECTIVES

1. Distinguish between kinetic and potential energy.
2. Explain the relationships between kinetic energy, heat, and changes in phase (state) of matter.
3. Describe the difference between heat and temperature.
4. Demonstrate heat transfer through (a) conduction, (b) convection, and (c) radiation.

5. Discuss the "R" values for different types of insulation.

6. Compare the cost of a "therm" of energy for (a) natural gas, (b) heating oil, (c) electricity in their community.

STANDARD 9	The students will investigate some characteristics and technological applications of electricity and magnetism.

OBJECTIVES

1. Demonstrate various methods of producing a static charge.
2. Identify the charge produced as positive or negative. Use an electroscope or other detection device.
3. Discuss the relationship between small static charges and lightning.
4. Use iron filings or other detection methods to map then describe the magnetic field of various kinds and shapes of magnets.
5. Describe a method for detecting a magnetic field surrounding a wire conducting an electric current.
6. Construct an electromagnet and determine the effect on its strength when (a) additional turns of wire are added and (b) more amperes are provided.
7. Construct simple series and parallel circuits and describe their characteristics.
8. Insert a voltmeter, ammeter, and an ohmmeter properly in a circuit and read each meter accurately.
9. Identify common methods for storing electricity.
10. Apply the principles of electricity and magnetism to explain how motors and generators work.
11. Identify common appliances and electronic devices whose operation is based on electromagnetic principles.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Biological- Earth Science (Core Option)	1.0	Mastery through Level 8

COURSE DESCRIPTION

NOTE: This is a proposed outline for a new science course. You will note that it is unpolished and needs considerable refinement. Your constructive criticisms for improvement or change are earnestly sought.

The focus of this course in the high school core is practical rather than theoretical. Emphasis is on problem solving and scientific reasoning applied to real world problems integrating knowledge from the life and earth sciences, as well as applied mathematics. Students develop the background necessary to understand and react to problems associated with: (1) the ecological interaction of the earth's living and non-living environments, (2) the impact on these environments from people's work in science and technology; (3) population dynamics; (4) the emerging field of human engineering and its impact on society; (5) the variations in acceptable environmental quality in the community, state, and nation; and (6) the use and renewal of natural resources. Learning activities are varied with an emphasis on student investigations in the field, laboratory, and library.

STANDARD 1	The students will recognize that interactions between the living and non-living environments result in a dynamic equilibrium.

OBJECTIVES

1. Infer relationships that exist among organisms forming a food web in a community.
2. Observe a biotic community and make a population study using sampling techniques.
3. Organize the information from a community study so there can be visual comparison such as graphs or charts.
4. Interpret the significance of loss or change in habitat in terms of people and wildlife.
5. Make an accurate conclusion or prediction from the information gathered in a biotic community study.

6. Study a subject relative to their community and apply the techniques of observation, sampling, measurement, and recording. Draw conclusions or make predictions from the information gathered.

STANDARD 2

The students will demonstrate an awareness of the importance and the problems created by uses of community, state, and national lands.

OBJECTIVES

1. Identify land owned by the state and national government in Utah.
2. Discuss some important uses of public lands and the resources that they provide.
3. Distinguish between actions that are harmful and those that are beneficial to the environment.
4. Evaluate the appropriateness and feasibility of making changes in their own behaviors relating to the environment.
5. Prioritize considerations that are important in land use planning.
6. Identify means by which negative impact on wildlife and other elements of a natural environment can be reduced.

STANDARD 3

The students will investigate and describe the structure and function of the cell.

OBJECTIVES

1. Identify and label the organelles of animal and plant cells.
2. Describe the functions of each of these organelles.
3. Compare specialization differences in cells (i.e., bacteria, protists, tissues-plant, and animal).
4. Consider structure of viruses as subcellular entities.
5. Recognize the dynamic life activities within cells (as opposed to the static character implied by drawings, charts, fixed slides).

6. Describe the stages of mitotic division.

7. Determine the importance of a knowledge of cells in such areas as:

   cancer research
   genetics
   blood studies
   bacteriology
   parisitology
   sanitation
   public health,
   etc.

STANDARD 4

The students will investigate the mechanisms of inheritance--including the implications of the complex problems of human genetics.

OBJECTIVES

1. Apply the concepts of probability, meiosis, homologous chromosomes, alleles, dominant and recessive traits, genotype and phenotype, pedigrees, sex linkage, etc., to the inheritance of genetic traits by working and investigating problems dealing with albinism, PTC tasting, hemophilia, blood types, etc.

2. Order the steps involved in the deletion, change, or insertion of genes in DNA (genetic engineering).

3. Describe and/or defend the present and future implications and fears of genetic engineering.

4. Apply the principles of genetics to the improvement and variation of plants and animals.

STANDARD 5

The students will investigate the various reproductive methods of organisms that result in the continuation and variation of species.

OBJECTIVES

1. Explain how alternation of generation applies to the life cycle of plants.

2. Identify the differences between asexual and sexual reproduction (including advantages and disadvantages to the species).

3. Discuss the importance of meiosis in sexual reproduction.

STANDARD 6	The students will investigate various matter-energy cycles and predict the effect of such cycles on man.

OBJECTIVES

1. Describe the importance of the carbon-hydrogen-oxygen cycles to life processes and energy storage.
2. Discuss the importance of nitrogen to living things.
3. Identify the steps and processes of the nitrogen cycle.
4. Interpret the significance of human influence on the nitrogen cycle through the production of chemical fertilizers.
5. Identify the steps and processes of the water cycle.
6. Describe the significant uses of water within their community or location (e.g., major sources, different uses, amount used).
7. Report on problems associated with water quality in their location.

STANDARD 7	The students will investigate the effects of pollutants on the environment.

OBJECTIVES

1. Collect data through observation, experimentation, and research which shows the extent of natural and man-made pollution of land, air, and water.
2. Describe the sources and the effects of natural and man-made pollution of land, air, and water.
3. Evaluate possible solutions to man-made pollution of land, air, and water.
4. Demonstrate behavior that does not degrade the environment.

STANDARD 8	The students will describe and interpret geological history.

OBJECTIVES

1. Describe the nature of geological dating including the use of radioactive dating as a means of identifying the age of rock structures.

2. Interpret geological history by knowing and applying the following principles:

   a. Superposition
   b. Original horizonality
   c. Uniformitarianism
   d. Geosynclines
   e. Floral and faunal evolution

3. Identify the various ways that fossil evidence is made and preserved within the environment.

4. Evaluate various theories based on the fossil record that are used to explain the present status of living things.

STANDARD 9	The students will interpret the geological fossil record as part of the past biological history.

OBJECTIVES

1. Relate present energy sources with their past origins.

2. Compare renewable and non-renewable resources.

3. Discuss the past geological history of the area where they live.

4. Interpret a geological map and geological column.

5. Generalize the information contained in the geological time scale and understand the ideas of how divisions are made.

6. Identify several theories that are used to explain the fossil record.

STANDARD 10	The students will explore career opportunities in applied biological-earth science areas.

OBJECTIVES

1. Evaluate jobs in the biological-earth science area in reference to job satisfaction, leisure time, working with people, training requirements, pay, security, etc.

2. Identify three jobs or careers for investigation, research, internship, or shadowing experiences.

STANDARD 11	The students will examine the basic processes of energy conversion in the environment.

OBJECTIVES

1. Describe the relationship between photosynthesis and food.

2. Relate the process of photosynthesis to products in their environment.

3. Identify a correct short formula for photosynthesis.

4. Identify simple sugar and starches via chemical tests.

5. Interpret the role of chlorophyll in photosynthesis.

6. List the materials needed and produced in the light reaction of photosynthesis.

7. Name the materials and products associated with the dark reaction of photosynthesis.

8. Identify at least four factors that may affect the rate of photosynthesis.

9. Discuss the contribution of each of the following people to photosynthesis:

    a. Melvin Calvin
    b. Joseph Priestly
    c. Van Neil
    d. Von Helmont
    e. Sevelier
    f. Igenhousz
    g. De Saussure

10. Explain the change in types of fish found in a lake during the stages of eutrophication.

11. Discuss methods to increase the amount of food produced (e.g., fertilizers, crop rotation, irrigation techniques, pesticides, etc.).

12. Chart the source and production of a typical evening meal.

STANDARD 12	The students will investigate problems biomedical ethics.

OBJECTIVES

1. Describe the current progress in biomedical technology such as transplants, implants, and the definition of death.

2. Identify and make conscious decisions about health practices leading to fitness oriented life-styles.

3. Evaluate medical practices in gerontology that are consistent with dignity and quality of life.

4. Evaluate various levels of biomedical technological intervention.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Physical-Earth Science (Core Option)	1.0	Mastery through Level 8

NOTE: This is a proposed outline for a new science course. You will note that it is unpolished and needs considerable refinement. Your constructive criticisms for improvement or change are earnestly sought.

COURSE DESCRIPTION

This one unit course in the high school core focuses on the practical rather than the theoretical. Emphasis is on problem solving and scientific reasoning applied to real world problems. It integrates knowledge from the physical and earth sciences, as well as applied mathematics. Students develop the background necessary for: (1) taking responsible action on energy-related issues; (2) recognizing the problems involved in finding, using, and conserving natural resources; (3) understanding the accomplishments of space research; and (4) assessing the impact of hard and soft technology on individuals and society. Stress is placed on the basic science processes such as observation, use of graphs, model development, measurement, and mathematical analysis. Learning activities are varied with an emphasis on student investigations in the field, laboratory, and library.

STANDARD 1	The students will investigate, interact with, and discuss the scientific principles, technological applications, and relevant implications of chemistry.

OBJECTIVES

1. Identify trends and draw inferences among the common chemical elements and families.

2 Balance simple chemical equations when given the formulas of the reactants and products and discuss the implications of a balanced formula.

3. Investigate the main classes of chemical reactions (i.e, (synthesis, decomposition, and replacement).

4. Compare and contrast, through laboratory investigations, the relationships among solids, liquids and gases (i.e., energy, volume, and order relationships; crystal properties; properties of liquids; and pressure-volume-temperature relationships within gases).

5. Given an experimental situation, identify the fixed, manipulated, and responding variables.

6. Prepare and describe various types of chemically produced materials (i.e., acids, bases, salts, soap, fibers such as nylon, petroleum distillates, alloys, etc.).

7. Describe uses of chemical technology in the home, agriculture, medicine, materials manufacturing, employment, and research (i.e., foods, energy sources, cleaning agents, building materials, pharmaceuticals, fertilizers, textiles, metallurgy, and plastics).

8. Evaluate the impact of chemical technology on the individual, society, and the environment (i.e., new and better products, standard of living, medicine/health, the quality and length of life, manufacturing, and economics).

9. Identify and analyze adverse effects of chemical technology and manufacturing processes (i.e., pollution, acid rain, waste disposal, and health hazards to employees and society).

10. Develop and defend possible directions or alternatives on a chemical technology issue such as acid rain, CO_2 production, plant location, waste disposal, use of natural resources, etc.

STANDARD 2	The students will investigate, interact with, and discuss the scientific principles, technological applications and relevant implications of physics and energy.

OBJECTIVES

1. Define energy and explain the law of conservation of energy.

2. Describe and illustrate Newton's laws of motion.

3. Describe relevant energy terminology and concepts (i.e., power, BTU, therms, kilowatt hours, and efficiency).

4. Investigate and compute force, work, and power using relevant data and formulas.

5. Demonstrate in the laboratory transformation between various forms of energy, and describe the technology which characterizes each transformation (i.e, chemical to heat, electrical to heat, light to electrical, gravity to mechanical, chemical to electrical, and electrical to sound).

6. Perform calculations using relevant data, dealing with such items as power and fuel bills (cubic feet of gas, therms, kilowatt hours), appliance operating costs, and efficiency.

7. Describe uses of energy technology in the home, communications, transportation, production, and manufacturing (i.e., heating, lighting, refrigeration, entertainment, lasers, fiber optics, satellites, gas engines, nuclear reactors, and agriculture).

8. Evaluate the impact of energy technology upon the individual, society, and the environment in such areas as standard of living, mobility, manufacturing, economics, and employment (i.e., leisure time, recreation, labor saving devices, new and better products, length of life, modes of transportation, research and development, and employment).

9. Identify and analyze possible adverse effects of energy production and consumption (i.e., finite resources, land use, development costs, production costs, pollution, waste disposal, and boom towns).

STANDARD 3

The students will investigate, interact with, and discuss the scientific principles, technological applications, and relevant implications of astronomy.

OBJECTIVES

1. Explain the relationship of gravity and rotational forces to the orbital paths of planets and satellites.

2. Discuss at least one hypothesis about the origin of the universe and the solar system.

3. Investigate star patterns in the night sky by observing the constellations and other clusters.

4. Describe the basic laws that govern the orbiting of satellites and planets (i.e., gravity, Kepler's laws, and Newton's laws).

5. Evaluate the impact of the space program in such areas as communications, land surveillance and mapping, defense, research, pollution monitoring, weather forecasting, energy and agricultural development, and employment.

6. Identify and analyze possible adverse effects of the space program (i.e., costs, pollution, space 'junk,' and fallout).

7. Develop and defend possible directions or alternatives on an issue such as military satellites, space stations, planetary mining, or space exploitation.

STANDARD 4

The students will investigate, interact with, and discuss the scientific principles, technological applications, and relevant implications of geology.

OBJECTIVES

1. Describe geological terms such as rock, mineral, petroleum superposition, and uniformitarianism.
2. Investigate common geological features formed by erosion, deposition, and diastrophism (i.e., valleys, deltas, alluvial fans, faults, and mountains).
3. Identify and describe the features produced by rapid and slow geological change (i.e., volcanism, landslides, flood deposits, faulting, and erosion).
4. Describe uses of common minerals and rocks. Identify and classify them in terms of their physical and chemical properties.
5. Separate a metal from its ore.
6. Interpret and use geological maps.
7. Describe uses of geological information in such areas as locating a building site, selecting weather resistant building materials, and exploring for energy resources.
8. Evaluate the impact on the individual, society, and the environment of fossil fuels, water resources, and minerals (i.e., fuel shortages, production costs, employment, pollution, water shortages and excesses, and boom towns).
9. Identify and analyze possible adverse effects of geological technology in such areas as mineral and fuel exploration, mining, drilling, and pollution.
10. Develop and defend possible directions and alternatives on an issue such as fuel shortages, depletion of mineral resources, depletion or contamination of ground water, pollution, preservation versus development of natural environments, recycling of resources, etc.

STANDARD 5	The students will investigate, interact with, and discuss the scientific principles, technologial applications and relevant implications of meteorology.

OBJECTIVES

1. Describe the uses of common meteorological instruments (i.e, barometer, anemometer, hygrometer, thermometer, rain gauge, atmospheric gas analyzer, and particulate monitors).

2. Explain common weather terminology (i.e., high pressure, low pressure, air mass, front, inversion, air quality index, relative humidity, upper air disturbance, and jet-stream).

3. Describe the hydrologic cycle (i.e., evaporation, condensation, energy transformations, and atmospheric composition).

4. Identify and interpret the meteorological conditions that affect weather patterns and establish climatic zones (i.e., latitude, land masses, topographical factors, water masses and currents, altitude, wind patterns, temperature differentials, volcanic activity, and man).

5. Infer the relationships among temperature-pressure-humidity on atmospheric conditions (i.e, cloud formation, wind, weather patterns and systems).

6. Describe uses of meteorological data in weather forecasting, economics, agriculture, recreation, and employment.

7. Evaluate the impact of meteorology and meteorological technology on the individual, society, and the environment (i.e., clothing, use of leisure time, selection of area to live in, construction methods and materials , industrial site selection, environmental factors, floods and violent storms, and forecasting).

8. Identify and analyze the pros and cons of cloud seeding.

9. Develop and defend possible directions or alternatives on a meteorological issue such as weather alteration and control, atmospheric pollutants, urban planning, and wind and ocean energy technology.

STANDARD 6	The students will investigate, interact with, and discuss the scientific principles, technologial applications and relevant implications of oceanology.

OBJECTIVES

1. Explain why ocean water, at different latitudes and depths, has different temperatures.

2. Identify on a world map major surface and subsurface ocean currents.

3. Sketch and label such shoreline features as berms, cliffs, bars, spits, tombolos, and caves.

4. Sketch and label such ocean floor features as shelves, slopes, trenches, plains, and ridges.

5. Separate and identify at least one mineral found in ocean water.

6. Graph and interpret the density of water as the water temperature changes.

7. Discuss uses of the oceans in such areas as transportation, fishing, mining, farming, and human habitats.

8. Evaluate the impact of ocean foods, minerals, energy, and research on the individual, society, and the environment (i.e., fish, kelp farms, medicines, fertilizers, tides, waste disposal, and weather patterns).

9. Propose oceanological applications or possible directions related to such future challenges as pollution controls, food production controls, food harvesting controls, mining controls, and coastal zoning.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Biology (Core Option)	1.0	Mastery through Level 8

COURSE DESCRIPTION

The one unit biology course in the high school core exposes students to a wide range of biological science topics in ecology, heredity and genetics, molecular biology, diversity of life, and change through time. The science processes of observation, measurement, hypothesizing, data gathering and interpretation, analysis, and application are stressed. Career opportunities in the biological sciences are examined. Learning activities are varied with an emphasis on student laboratory investigations:

NOTE: The first three standards emphasize that all life is unified by a number of basic similarities or patterns (UNITY); standards 4-6 that life today is a continuation, with some changes, of life in the past (CONTINUITY); standards 7-8 that modification of life patterns results in a diversity among organisms (DIVERSITY); and standards 9-10 that patterns of interaction exist between organisms and their environment (INTERACTION).

STANDARD 1

The students will discover that the cells of living organisms are composed of essentially the same substances. (CELL CHEMISTRY)

OBJECTIVES

1. Distinguish between the terms element, molecule, and compound as they relate to living systems.

2. Compare and contrast the role of the following essential molecules in cells: carbohydrates, fats, proteins, and nucleic acids.

3. Explain the nature and role of enzymes within the living cell.

STANDARD 2

The students will recognize that organisms have basic structural and functional properties at the cellular level. (CELL STRUCTURE AND FUNCTION)

OBJECTIVES

1. Assess the contributions of each of the following to the field of cell biology.
    - a. Robert Hooke
    - b. Mathias Schleiden and Theodor Schwann
    - c. Rudolph Virchow
2. Summarize the function of each of the organelles within a plant/animal cell.
3. Discuss the following processes relating to the cell:
    - a. Diffusion
    - b. Osmosis
    - c. Active Transport
4. Explain cell division and describe the phases of mitosis.
5. Recognize that cells are the foundation of higher levels of organization (e.g., tissues, organs, etc.).

STANDARD 3	The students will describe a number of biochemical pathways that are common to all living organisms. (CELL ENERGY)

OBJECTIVES

1. Distinguish between autotrophs and heterotrophs.
2. Explain the role of ATP as the source of cell energy.
3. Identify the materials needed and produced in the light and dark reactions of photosynthesis.
4. Compare and contrast the processes of photosynthesis and respiration.
5. Differentiate between aerobic and anaerobic respiration (fermentation).

STANDARD 4

The students will investigate the patterns by which organisms reproduce to preserve the species. (REPRODUCTION)

OBJECTIVES

1. Contrast sexual and asexual reproduction.
2. Discuss alternation of generations in plants as another reproductive method.
3. Illustrate/explain meiosis and its importance in sexual reproduction.

STANDARD 5

The students will explain the passage of hereditary information by a genetic code. (HEREDITY)

OBJECTIVES

1. Assess the contributions of each of the following to the field of heredity.
   - a. Gregor Mendel
   - b. Thomas Hunt Morgan
   - c. James Watson and Francis Crick
2. Describe the structural framework of DNA and recognize its role as the basis of the genetic code.
3. Discuss the process of DNA duplication, mRNA transcription and tRNA translation in protein synthesis.
4. Define the following terms:
   - a. Pure breeding
   - b. Dominant trait
   - c. Recessive trait
   - d. P_1, F_1, F_2 generations
   - e. Hybrid
   - f. Monohybrid
   - g. Dihybrid
   - h. Phenotype
   - i. Genotype
   - j. Homozygous
   - k. Heterozygous
   - l. Genes and chromosomes
   - m. Allele
   - n. Gamete
   - o. Incomplete dominance
   - p. Mutation

5. Use either the Punnett square method or product rule method to solve genetic problems involving monohybrid and dihybrid traits.

6. Demonstrate how probability is involved in predicting the inheritance of traits.

7. Identify the genetic basis for sex determination.

8. Use either the Punnett square method or product rule method to solve genetic problems involving sex-linkage.

STANDARD 6

The students will describe and interpret current and historical scientific theories on the origin of life and organic variation. (EVOLUTION)

OBJECTIVES

1. Assess the contributions of the following in the field of evolution:
   a. Jean Lamarck
   b. Charles Darwin

2. Compare various theories on the origin of life.

3. Describe how the fossil record is used to support the idea that organisms evolve and that organisms living today are descendants of earlier forms.

4. Identify how natural selection acts as the vehicle for evolution.

5. Discuss how the following evolutionary mechanisms relate to organic variation:
   a. Adaptation
   b. Mutation
   c. Isolation
   d. Migration

STANDARD 7

The students will classify organisms by comparing similarities and differences in their structure and function. (CLASSIFICATION)

OBJECTIVES

1. Assess the contributions of each of the following to the study of classification:

    a. Aristotle
    b. Carolus Linneaus

2. Investigate structural similarities as a basis for classification and identify biochemical and genetic similarities as additional factors.

3. Explain and illustrate, with examples, the binomial system of scientific naming.

4. Classify organisms using a dichotomous key.

STANDARD 8	The students will cite evidence that living things progress from simple to more complex organization resulting in a variety of life. (DIVERSITY)

OBJECTIVES

Protists, fungi, monera

1. Assess the contributions of each of the following to the study of microbiology:

    a. Anton von Leeuwenhoek
    b. Louis Pasteur

2. Describe and compare the characteristics which identify the protists, fungi, and monera.

3. Perform the proper microbial techniques used in making or completing the following:

    a. Pour plates
    b. Streak plates
    c. Population counts
    b. Stained slides
    c. Care and handling of cultures

4. Evaluate several beneficial and harmful effects of protists, fungi, and monera as they relate to humana.

Plants

5. Describe and compare the characteristics of algae, bryophytes, and tracheophytes.

6. Compare the sporophyte and the gametophyte generations in mosses and ferns.

7. Contrast the structural and functional differences between monocots and dicots.

8. Evaluate several beneficial and harmful effects of plants as they relate to humans.

Animals

9. Describe and compare the characteristics of major invertebrate phyla and the diversity within each.

10. Describe and compare characteristics of major vertebrate classes and the diversity within each.

11. Evaluate several beneficial and harmful effects of animals as they relate to humans.

STANDARD 9	The students will explain how continual interactions between the living and nonliving environment result in a dynamic balance within an ecosystem. (ECOLOGICAL RELATIONSHIPS)

OBJECTIVES

1. Discuss the following basic elements of an ecosytem.

    a. Abiotic factors such as temperature, moisture, light, nutrients, and nonliving entities.

    b. Energy flow as it pertains to trophic (feeding) levels, food chains, food webs, pyramids, etc.

    c. Biotic factors including producers, consumers, and decomposers.

    d. Nutrient cycles such as water, carbon-oxygen, nitrogen, etc.

2. Relate the following to an ecosystem:

    a. Biome
    b. Community
    c. Niche
    d. Population
    e. Habitat

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STANDARD 10	The students will observe that a natural balance between organisms and their environment can be altered by natural or man-controlled events. Cite examples. (BALANCE OF NATURE)

OBJECTIVES

1. Recognize ways that humans have changed the abiotic and biotic factors in the biosphere such as pollution, invasion, alterations, etc.
2. Define succession and give examples.
3. Evaluate an individual's place in and responsibility to the ecosystem.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Chemistry (Core Option)	1.0	Algebra and mastery through Level 8

COURSE DESCRIPTION

The one unit chemistry course in the high school core includes a continuing application of science processes such as measurement, controlled experimentation, use of proper units, and data interpretation. Content includes matter and its changes, atomic structure, use of the periodic table, chemical bonding, chemical equations, gas laws, acids, bases, salts, and chemical kinetics. Career opportunities in chemistry are investigated. Learning activities are varied with an emphasis on student laboratory investigations.

STANDARD 1

The students will demonstrate appropriate laboratory techniques and safe use of equipment while working individually and in small groups.

OBJECTIVES

1. Demonstrate correct methods of using a laboratory burner, thermometer, buret or eudiometer, graduated cylinder, balance, funnel and filter. Also demonstrate proper procedures for transferring chemicals, assembling various kinds of chemical apparatus, and using safety apparel.
2. Demonstrate the proper use of a fire blanket, fire extinguisher, eye bath, and emergency shower.
3. Describe emergency procedures and other precautions necessary when using acids, bases, and other hazardous chemicals.
4. Respond correctly to a simulated accident.
5. Write a brief summary of the uses of the safety equipment in the laboratory.

STANDARD 2

The students will use the periodic table to interpret and predict chemical and physical properties of elements.

OBJECTIVES

1. Predict trends and patterns of atomic size, reactivity within a family, ionization energy, electronegativity, and metallic properties based on the periodicity of the elements.

2. Demonstrate a knowledge of the relationship of electron configuration to valence/combining powers by using this relationship to predict chemical formulas and properties.

3. Explain the historical contribution of Mendeleev and Moseley to the evolution of the modern periodic table.

4. Select from a list of possibilities the important properties of the following: alkali metals, alkaline earth metals, halogens, and noble gases.

5. Define a family/group and series/period on the periodic table.

6. Given a description of the properties of several unidentified or fictitious elements, arrange each element into its appropriate family.

STANDARD 3

The students will model the atom in terms of the location and arrangement of protons, neutrons, and electrons.

OBJECTIVES

1. Given a sample atom from the periodic chart, identify or compute the number of protons, neutrons, and electrons from the atomic and mass numbers.

2. Compare or contrast the relative mass and charge of a proton, a neutron, an electron, and their spatial relationship within an atom.

3. Using a diagram or model of an atom, identify the location of the nucleus, protons, neutrons, and electrons.

4. Define the term isotope and describe its relationship to atomic weight.

5. Using the periodic table, give the name and symbol for a selected element when the electron configuration is given.

STANDARD 4	The students will write and balance chemical equations.

OBJECTIVES

1. Given the formulas for the reactants and products, balance a chemical equation using conservation of atoms and charge as the criteria.
2. From a list of reactions, identify the following: products, reactants, synthesis reactions, decomposition reactions, replacement/displacement reactions, and double replacement/displacement reactions.
3. From a list of chemicals, write balanced equations using those chemicals that will demonstrate synthesis reactions, decomposition reactions, replacement/displacement reactions, and double replacement/displacement reactions.
4. Given a list of common ions and a word equation, write a balanced equation using chemical symbols.
5. Given a written chemical equation with an energy term such as (calorie) included, determine whether the reaction is endothermic or exothermic.

STANDARD 5	The students will interpret chemical bonding using appropriate models and notation.

OBJECTIVES

1. Define ionic bonding and covalent bonding.
2. Given a table and the periodic chart, use the concept of electronegativity to predict the kind of bonding that will occur between atoms of different elements (e.g., ionic, covalent, polar-covalent).
3. Compare the characteristics and properties such as melting point, boiling point, brittleness, and conductivity of ionic versus covalent substances.
4. Use electron-dot symbols to describe ionic and covalent bonding between elements.

STANDARD 6

The students will solve stoichiometric problems using the molar relationship given in a chemical equation.

OBJECTIVES

1. Using a balanced equation, apply Avogadro's principle and the mole concept in solving problems dealing with mass-mass, mass-volume, and volume-volume relationships.
2. Apply the law of definite composition in determining empirical formulas for chemical compounds.
3. Calculate the percentage composition of a compound.

STANDARD 7

The students will explain the behavior of matter in each of its three phases.

OBJECTIVES

1. Use the concept of molecular motion to explain observations associated with phase change.
2. Identify and explain the parts of the heating curve of a phase change and describe the changes in heat content and temperature associated with the various parts of the curve.
3. Compare and contrast solids, liquids, and gases with respect to fluidity, density, compressibility, and diffusion.
4. Describe the effects of pressure and temperature in a gaseous system and be able to calculate the value of one variable (volume, temperature, or pressure) when changes in the other two are known.
5. Perform experiments dealing with change of phase and analyze data and graphs derived from these experiments.
6. Given the proper chemicals and equipment, design and perform an experiment for the production of hydrogen and its collection by water displacement, giving the proper set-up of apparatus, methods of measurement, and calculations, including converting volume of the gas to standard conditions.

STANDARD 8	The students will explain aqueous solution phenomena.

OBJECTIVES

1. Define dissociation and describe the relationship between the electrical conductance and the dissociation of a solution.

2. From a description of an aqueous solution, including amounts and formulas of solute and solvent, equations involved, and constants, determine the molarity, freezing-point depression, and boiling-point elevation of the solution.

3. From a list of rules for solubility, predict whether a given chemical is soluble or insoluble in water.

STANDARD 9	The students will explain the nature and activities of acids, bases, and salts.

OBJECTIVES

1. Define acids and bases in terms of properties, of proton acceptance or donation, and the kinds of ions produced in solutions.

2. Given a strong acid or base, calculate pH $[H_3O^+]$, and $[OH^-]$.

3. From a given amount of concentrated acid or base, calculate the amount needed to make a solution of specified concentration in a specified quantity.

4. Given the proper chemicals and equipment, design and perform a titration of a strong acid and a strong base with phenolphthalein as the indicator. The student will outline the arrangement of the apparatus, the methods of measurement, the end point determination, and calculations to include amount of the acid used, amount of base used, and the concentration of the unknown acid or base.

5. Given the pH of two solutions, compare the degree of acidity or basicity.

6. Write balanced chemical equations to describe the reactions of acids with carbonates, hydroxides, and metals.

7. Identify the effects of acids and bases on the indicators phenolphthalein, litmus, and methyl orange.

8. Name the acids HCl, HNO_3, H_2SO_4, H_2CO_3, and $HC_2H_3O_2$.

STANDARD 10	The students will solve problems in chemistry.

OBJECTIVES

1. Use equations to solve quantitative problems expressing the answers to the correct number of significant figures.

2. Use ratio and proportion to make unit conversions and solve quantitative problems.

3. Use factor label (dimensional/unit analysis).

4. Analyze, interpret, and construct graphs.

5. Show knowledge of the metric system by making conversions within the metric system and using metric units.

6. Demonstrate knowledge of scientific notation by converting decimal numbers to exponential notation and exponential notation to decimal numbers.

7. Apply the rules for significant figures to determine the number of significant figures in a measurement or given number.

STANDARD 11	The students will conduct and critically evaluate experiments in which variables are measured, analyzed, and controlled.

OBJECTIVES

1. In a written report of a chemical experiment, present experimental objectives, procedures, data, analyses, and formulated conclusions or generalizations.

2. Using appropriate procedures, analyze or evaluate data for trends, patterns, and error.

3. Collect and organize data from a chemical experiment.

4. Given an experimental objective, chemicals, and apparatus to be used, design an appropriate way to safely conduct a chemical experiment.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Physics (Core Option)	1	Algebra and mastery through Level 8

COURSE DESCRIPTION

In the one unit physics course in the high school core, students will use the science process skills to investigate the principles of mechanics, gravitation, heat, waves, sound, light, electricity, magnetism, atomic physics, and relativity. The use of mathematics, data gathering, data interpretation, and analysis are stressed. Career opportunities related to physics are examined. Learning activities are varied with an emphasis on student laboratory investigations. The course is strongly recommended for the student who is interested in science, engineering, technical, or health professions as a career.

STANDARD 1

The students will collect and analyze data; construct and interpret graphs; and use significant figures, scientific notation, order of magnitude, unit analysis, and basic mathematical functions.

OBJECTIVES

1 Collect and analyze data from physics experiments, then propose valid conclusions.

2. Construct and interpret graphs, charts, and tables of data.

3. Manipulate numbers using scientific notation.

4. Use unit analysis in solving problems.

5. Use appropriate mathematical functions in solving problems.

STANDARD 2

The students will solve problems involving velocity and acceleration of objects, using both scalar and vector procedures.

OBJECTIVES

1. Define speed, velocity, displacement, scalar, and vector.

2. Solve problems involving constant speed.
3. Measure distance and time and determine average speed.
4. Find the resultant of two vectors and resolve a vector into perpendicular components.
5. Solve problems involving displacement vectors using the graphic method.
6. Solve problems involving velocity.
7. Define acceleration.
8. Solve problems of uniform linear acceleration.

STANDARD 3

The students will identify Newton's three laws of motion and solve problems related to force, mass, and acceleration.

OBJECTIVES

1. Describe quantitatively the relationships among force, mass, and motion.
2. State Newton's three laws of motion.
3. Solve problems involving force vectors.
4. Perform experiments and solve problems involving uniform circular motion.
5. Distinguish between mass and weight.

STANDARD 4

The students will describe the relationships among work, energy, and power and solve related problems.

OBJECTIVES

1. Distinguish between muscular "work" and work in the scientific sense.

2. Identify the newton, joule, and watt in fundamental units.
3. Describe the relationships among work, energy, and power.
4. Find the amount of potential energy stored in an object that is elevated.
5. Find the quantity of kinetic energy given to an object from the amount of work performed on the object.
6. Solve problems involving the law of conservation of momentum and conservation of energy.
7. Describe the six simple machines in terms of energy, force, speed, and change of direction and solve related problems.

STANDARD 5	The students will describe the first and second laws of thermodynamics and solve problems relating to temperature and heat.

OBJECTIVES

1. Distinguish between a calorie and a joule.
2. Solve problems concerning an object's heat energy absorbed or released during a temperature change.
3. Perform experiments and solve problems involving the exchange of heat between various substances.
4. Do experiments and use the data gathered to solve problems dealing with heat of fusion and heat of vaporization of various substances.
5. Describe heat transfer in terms of radiation, conduction, and convection.
6. State the laws of thermodynamics.

STANDARD 6	The students will describe the basic characteristics of waves and their relationships to wave phenomena.

OBJECTIVES

1. Describe the relationships among frequency, period, wavelength, and velocity of waves and work related problems.

2. Define the terms: quality, harmonics, overtones, fundamental, amplitude, pitch, and resonance of sound waves.

3. Differentiate between transverse and longitudinal waves.

4. Use the characteristics of wave phenomena in No. 1, plus amplitude and phase, to interpret and explain

   a. Reflection
   b. Refraction
   c. Diffraction
   e. Interference
   e. Doppler effect
   f. Standing wave
   g. Polarization

STANDARD 7	The students will apply the laws of reflection and refraction to solve problems involving the path of light.

OBJECTIVES

1. Solve problems using the law of reflection.

2. Draw ray diagrams for mirrors and lenses.

3. Describe the properties of real and virtual images.

4. Solve problems involving the passage of light between two different media.

5. Recognize diagrams of various types of lenses and describe their properties.

6. Explain the dispersion of sunlight by a prism, using the relationship to color, frequency, and refractive index.

STANDARD 8	The students will apply principles and relationships of electrostatics and electric current to solve problems involving electric circuits.

OBJECTIVES

1. Describe ways objects become charged.
2. Identify positive and negative charges.
3. Describe the relationship among potential difference, work, charge, and solve related problems.
4. Identify a volt and an ampere in terms of fundamental units.
5. Solve problems involving series, parallel, and series-parallel circuits and draw simple schematics.
6. Correctly wire an ammeter and a voltmeter into a circuit.

STANDARD 9	The students will describe the origins and interactions of gravitational, electrical, and magnetic fields.

OBJECTIVES

1. Define the law of universal gravitation and describe the origin of the gravitational force.
2. Calculate the gravitational force between two given objects.
3. State Coulomb's law and solve related problems.
4. Evaluate the force relationship between the magnitude of the source and the distance from the source in both the universal law of gravitation and in Coulomb's law.
5. Describe the empirical relationship between electric currents and magnetic fields.
6. Identify the similarity between electric motors and generators.

STANDARD 10	The students will identify the main segments of the electromagnetic spectrum in terms of frequency and/or wavelength.

OBJECTIVES

1. Classify the main segments of the electromagnetic spectrum (visible light, radio, micro, infrared, gamma, and ultraviolet).
2. List one major application of each segment of the electromagnetic spectrum.
3. Given two regions of the electromagnetic spectrum, determine the one with the higher energy. Verify through experimentation.
4. Calculate the energy of a given wavelength.
5. Perform experiments using such equipment as a spectrometer, spectrum tubes, prisms, or light meter.

STANDARD 11	The students will investigate and discuss radioactivity, its effects, and uses.

OBJECTIVES

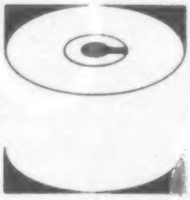
1. Describe the three principal types of radioactivity (alpha particles, beta particles, and gamma rays).
2. Distinguish between natural and artificial radioactivity and give an example of each.
3. Compare and contrast fission and fusion.
4. Explain where the energy comes from in fission and fusion reactions.
5. Define half-life and recognize the typical curve associated with it.
6. Experiment with approved radioactive sources, electroscopes, Geiger counters, and shields. Observe all safety procedures.
7. Discuss some pros and cons of using nuclear energy to generate electricity.

FIELD TRIAL

STANDARD 12	The students will describe the scientific achievements and professional attributes of one of the following: Enrico Fermi, Albert Michelson, Max Planck, Albert Einstein, Count Rumford, Louis DeBroglie, Marie Curie, Lise Meitner, Murray Gell-Mann.

Section D

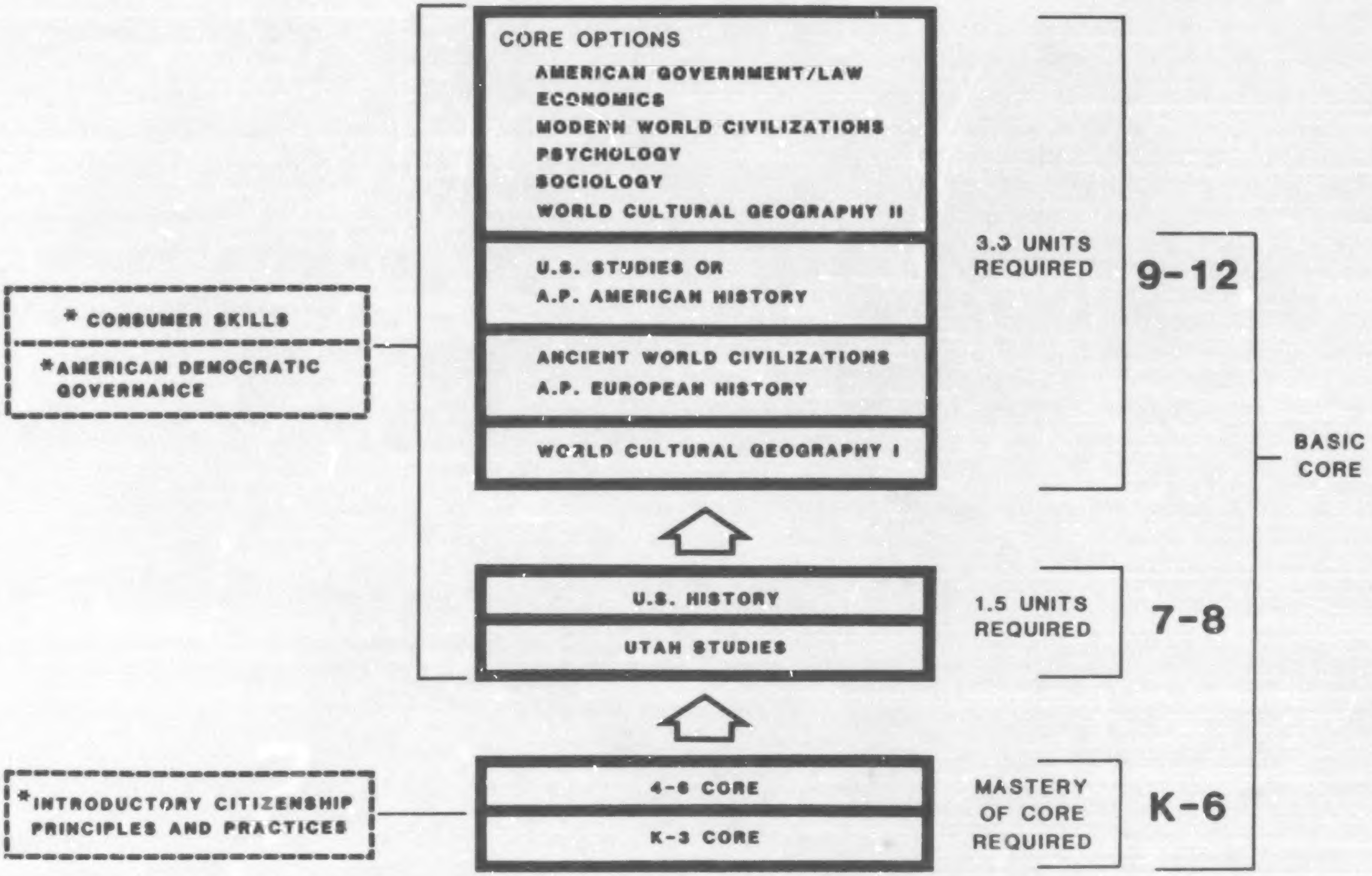
SOCIAL STUDIES



RECOMMENDED

SOCIAL STUDIES COURSE CHART

FIELD TRIAL



CORE OPTIONS
AMERICAN GOVERNMENT/LAW
ECONOMICS
MODERN WORLD CIVILIZATIONS
PSYCHOLOGY
SOCIOLOGY
WORLD CULTURAL GEOGRAPHY II

U.S. STUDIES OR
A.P. AMERICAN HISTORY

ANCIENT WORLD CIVILIZATIONS
A.P. EUROPEAN HISTORY

WORLD CULTURAL GEOGRAPHY I

3.0 UNITS REQUIRED

9-12

* CONSUMER SKILLS

*AMERICAN DEMOCRATIC GOVERNANCE

U.S. HISTORY

UTAH STUDIES

1.5 UNITS REQUIRED

7-8

BASIC CORE

*INTRODUCTORY CITIZENSHIP PRINCIPLES AND PRACTICES

4-6 CORE

K-3 CORE

MASTERY OF CORE REQUIRED

K-6

*These concepts as required by board policy are integrated into the Charted Core Curriculum

CORE CURRICULUM FOR SOCIAL STUDIES EDUCATION

K-3

COURSE DESCRIPTION

The students will be introduced to the study of self and self's relationship to each individual's family, school, neighborhood, and community; basic citizenship behaviors, the interdependence of individuals and groups in different cultures and environments, the world of work, the use and care of natural resources, community governments and local history will be emphasized. In addition, the students will begin a study of the earth, its size, shape, land masses, oceans, climates, directions, and its relation to the universe. All social studies experiences will develop listening, speaking, reading, writing, and citizenship skills.

LEVEL K

STANDARD 1

The students will understand that individuals live in groups and their life-styles are influenced by customs and traditions.

OBJECTIVE

1. Identify different kinds of groups (family, school, neighborhood) to which they belong.
2. Discuss ways that people are alike and ways they are different.
3. Identify values, traditions, and customs that are learned from families.
4. Identify why special events are sometimes celebrated through various national holidays.
5. Compare ways that various cultures celebrate holidays.

STANDARD 2

The students will understand basic geographic concepts and map symbols.

OBJECTIVES

1. Identify the globe as a model of the earth.

2. Identify the major characteristics of the seasons: summer, fall, winter, and spring.
3. Identify map symbols used in the neighborhood and school.

STANDARD 3	The students will understand responsible citizenship and why rules are necessary to protect the individual.

OBJECTIVES

1. Participate in making classroom rules with other class members.
2. Identify why rules are important.
3. Identify what authority is and why it is important.
4. Identify basic individual rights and responsibilities.
5. Share materials, respect other people's property, and show courtesy.

STANDARD 4	The students will understand that individuals have unlimited wants but limited resources.

OBJECTIVES

1. Identify items that are scarce.
2. Identify resources that are used to make the things we need or want.
3. Identify the purpose of money as something which is used to purchase things.
4. Identify the value of work as a way to achieve personal satisfaction and to earn money.

STANDARD 5

The students will demonstrate the ability to use a variety of thinking skills in completing social studies activities.

OBJECTIVES

1. Participate in group discussions.
2. Participate in group role playing experiences.
3. Examine a variety of ideas.
4. Follow simple directions.

LEVEL 1

STANDARD 1

The students will understand that the family, school, and neighborhood provide basic needs and learning experiences.

OBJECTIVES

1. Identify examples of how individuals learn from the family, school, and neighborhood.
2. Show ways in which families provide the basic needs of love, food, shelter, clothing, companionship, and protection to their members.
3. Compare similarities and differences among families, schools, and neighborhoods.
4. Show that every individual has dignity and worth and is unique.

STANDARD 2

The students will understand that where people live influences how they live.

OBJECTIVES

1. Identify the geographic features, climatic conditions, and natural resources of the local area.
2. Demonstrate how geographic features, climatic conditions, and natural resources influence how they live.
3. Name natural and man-made changes in their environment, i.e., lakes, volcanoes, reservoirs, highways.

STANDARD 3

The students will understand basic geographic concepts.

OBJECTIVES

1. Identify map symbols which represent real things.

2. Identify the meaning of symbols on picture maps.
3. Identify the directions of north and south in relation to the North and South Poles.
4. Name the days of the week in order, special dates on the calendar, and certain physical characteristics of months and seasons.
5. Construct a simple map of the classroom.

STANDARD 4	The students will understand basic consumer needs and related occupations.

OBJECTIVES

1. Understand that when individuals make choices, they must give up something (opportunity cost).
2. Categorize products into "goods" or "services."
3. Name various careers students might prefer.
4. Identify skills needed for familiar jobs.
5. Understand that some needs may not be satisfied.

STANDARD 5	The students will understand that individuals need rules to govern group behavior.

OBJECTIVES

1. Make classroom rules with other class members.
2. Identify the reasons for authority and rules.
3. Show how rules promote fair treatment of all people.
4. Explain how orderly classrooms depend upon cooperation.
5. Participate in patriotic activities.

6. Identify acts of honesty, morality, courtesy, and good citizenship in classmates, teachers, and other adults.

STANDARD 6	The students will practice a variety of listening, speaking, writing, and reading skills in completing social studies activities.

OBJECTIVES

1. Identify a logical sequence for tasks.
2. Categorize items of information that are similar from those that are different.
3. Predict one simple conclusion to a story or situation.
4. Recall facts from a story or a report.
5. Describe two possible solutions to a problem in the family, school, or neighborhood.
6. Participate in group activities and demonstrate respect for basic values of all people.

LEVEL 2

STANDARD 1	The students will show how individuals are products of their culture and how individual talents and traits are developed.

OBJECTIVES

1. Identify cultural traits and values that are acquired as opposed to inherited.
2. Show ways in which individuals learn behavior and values from groups in the community.
3. Identify talents of self and others and discuss how they can be developed.
4. Show ways in which the talents of others have influenced the community.
5. Identify aspirations for using their own talents.

STANDARD 2	The students will understand basic geographic concepts.

OBJECTIVES

1. Identify oceans and continents on a map and a globe.
2. Compare the size of the United States with Utah on a map and a globe.
3. Compare differences of an area's size and shape as shown on a flat map with the way they are illustrated on a globe.
4. Find the directions of north, south, east, and west on a map.
5. Describe how the equator divides the earth into the northern hemisphere and the southern hemisphere.
6. Show the direction of sunrise and sunset.
7. Identify important sites of the community on an area map.
8. Describe how geographic features vary in different communities.

STANDARD 3

The students will understand that because change is constant, life in any community differs from the past.

OBJECTIVES

1. Identify community events of the past, present, and future.
2. Identify important local historical sites.
3. Tell about the history of their local community.
4. Describe different factors that influence change.
5. Describe the contributions of various cultures that have influenced life in the community.

STANDARD 4

The students will understand that in a work-oriented society, individuals perform tasks to provide goods and services for themselves and others.

OBJECTIVES

1. Identify the ways producers and consumers determine what to produce, how to produce, and for whom to produce (supply and demand).
2. List jobs of people in the community who produce goods and/or services.
3. Identify some of the skills needed for community jobs that provide goods and services.

STANDARD 5

The students will understand that groups establish rules and procedures for enforcement.

OBJECTIVES

1. Name people who help in establishing order and developing values within the community.

2. Compare the differences between power and authority.
3. Identify how acceptance of individual responsibility increases the degree of fairness and freedom in the community, school environment, and classroom.
4. Participate in patriotic activities and understand their meaning.

STANDARD 6	The students will practice a variety of listening, speaking, writing, and reading skills in completing social studies activities.

OBJECTIVES

1. Identify ways to resolve conflict when opinions differ.
2. Participate in group writings, charts, diaries, and letters.
3. Discuss alternative solutions to classroom problems.
4. Locate and use social studies materials in the classroom library and/or media center.
5. Use a variety of resources to study the community.
6. Recall facts from a story or a report in sequence.
7. Demonstrate that through group participation one develops citizenship values.

LEVEL 3

STANDARD 1	The students will understand cultural diversity.

OBJECTIVES

1. Discuss different cultures in their community and contributions made from each culture.
2. Identify the past and present contributions of women and minorities to their community.

STANDARD 2	The students will understand that people use natural resources to meet their basic needs and these resources must be protected and conserved.

OBJECTIVES

1. Identify different environments in which groups live throughout the world.
2. Illustrate ways groups use natural resources in the environment to meet their basic needs.
3. Describe how groups modify the environment to use and increase the supply of resources.
4. Identify reasons for the location of a city.

STANDARD 3	The students will understand geographic concepts.

OBJECTIVES

1. Locate land and water types by their shapes such as islands, bays, isthmuses, lakes, and peninsulas.

2. Locate the eastern and western hemispheres, the prime meridian, and the 180th meridian.

3. Using a simple grid, show how a grid system works and identify local places on a map.

4. Use scales and legends on maps.

5. Use symbols for landscape features on a simple map.

6. Identify the differences between people-drawn boundaries and natural boundaries (those which follow natural features such as mountains or rivers).

7. Distinguish between towns, cities, states, countries, and continents using maps.

8. Using north as a reference, identify on a map, globe, or with a compass the directional terms--left, right, north, south, east, and west.

9. Locate places as being north or south of the equator on a map or globe.

STANDARD 4	The students will understand the interplay of economics in their daily lives.

OBJECTIVES

1. Explain reasons for spending and saving money.

2. Identify the relationship between demand and supply and its effect on the price of a product.

3. Identify the value to individuals and society when people specialize in different occupations (productivity and interdependence).

4. Identify changes in the types and demand for jobs in your area in the past, present, and future.

6. Identify the role of profits as being the primary reason for production.

7. Identify how inventions influence change in society.

STANDARD 5	The students will understand that the purpose of government is to protect and serve the needs of citizens.

OBJECTIVES

1. Explain the need for government in a society.
2. List ways that government resolves conflicts.
3. Compare ways that groups or societies determine how they will be governed.
4. Discuss responsibilities that individuals have in making a community a better place to live.
5. Discuss their responsibility in making and following class rules.
6. Identify how laws are established, and how they relate to individuals, families, and communities.
7. Identify the purpose of patriotic holidays and how citizens participate (Veteran's Day, Law Day, Independence Day, etc.).
8. Explain how participating in and contributing to government develops good citizenship behavior.
9. Identify good acts of honesty, morality, and good citizenship they have observed in their classmates, teachers, and other adults.

STANDARD 6	The students will practice a variety of listening, speaking, writing, and reading skills in completing social studies activities.

OBJECTIVES

1. Participate in a variety of activities such as creating stories that promote thinking and problem solving skills.
2. Develop a model for making an effective solution to common problems.
3. Arrange major historical events in sequential order.

4. Locate and use source/reference materials in the classroom, library and/or media center, community library and other community resources.

5. Write an original answer to a current issue/problem.

LEVELS 4 - 6

COURSE DESCRIPTION

The students will be introduced to a study of people and their ability to use past experiences to improve their way of life on a state, national, and international level. Emphasis at these levels will be to expand listening, speaking, reading, writing, and citizenship skills to a higher level of proficiency. Historical, geographical, political, and economic concepts will comprise the core.

LEVEL 4

STANDARD 1	The students will explain how the historical and cultural development of Utah is different from that of other states.

OBJECTIVES

1. Discuss the cultural contributions made to Utah's history by the following groups of people:
   - a. American Indians
   - b. Explorers
   - c. Traders and trappers
   - d. Mormons and other religious groups
   - e. Others
2. List and compare different cultural traditions and values of people in Utah and around the world.
3. Analyze the contributions of various women and ethnic groups to Utah's cultural and historical development.

STANDARD 2	The students will explain how the geographical features of places within Utah, and other areas of the world, vary and contribute to their distinctiveness.

OBJECTIVES

1. Describe the land areas of Utah (Basin and Range Province, Colorado Plateau, and Rocky Mountains) and the physical features

of the desert, mountains, lakes, and rivers and compare them to other regions of the world.

2. Describe the industries in Utah (transportation, communication, mining, manufacturing, construction, agriculture, technology and governmental industry) and compare them to other industries throughout the world.

3. Locate on a map of Utah its major scenic attractions.

4. Use parallels and meridians, latitude, and longitude to determine direction and location.

5. Use various maps, such as the Utah highway map and atlas maps, to locate scenic attractions, countries, and major physical features.

6. Use a highway map legend to determine mileage between two points.

7. Use two different types of maps to identify topography, climate, and land use.

8. Identify different types of boundary lines such as county, state, national, and international.

STANDARD 3	The students will explain why economic systems provide for the production and distribution of goods and services.

OBJECTIVES

1. Define the free enterprise system as one in which individuals in their varying capacities as consumers, producers, workers, savers, and investors register their freely made decisions.

2. Identify the role that profit and loss play in making production decisions.

3. Explain how the interaction of supply and demand determines the price of a product.

STANDARD 4

The students will explain how the government operates in Utah and compare it to other forms of government around the world.

OBJECTIVES

1. Discuss how laws are made in the state of Utah.
2. Explain why citizens have responsibilities to uphold the laws of the state.
3. Examine other forms of government throughout the world.
4. Contrast governments which have different forms of control and which are reflective of their values.
5. List the duties of various elected state and local officials.
6. Explain the similarities between the constitutions of Utah and the United States.

STANDARD 5

The students will utilize a variety of speaking, listening, writing, reading, and citizenship skills in completing social studies activities.

OBJECTIVES

1. Use researching, interviewing, and charting techniques to demonstrate mastery of concepts learned.
2. Formulate a plan to solve a problem and determine appropriate actions.
3. Use indexes, glossaries, and newspapers to find additional information about a social studies topic.
4. Verbalize the rights and responsibilities of good citizens of the state of Utah.

LEVEL 5

STANDARD 1	The students will analyze how the historical past of the Western Hemisphere influences the present.

OBJECTIVES

1. Outline the major historical events, people, wars, and documents that played a significant role in United States history from 1492 to the present.

2. Analyze the effects that the United States Constitution and Declaration of Independence have on the lives of students.

3. Describe the historical background and cultural contributions of the peoples of:

   a. Canada.
   b. Central America.
   c. South America.

4. Identify the interdependence of the various cultures of the Western Hemisphere.

STANDARD 2	Explain that the geographical features of places within the Western Hemisphere vary and contribute to their distinctiveness.

OBJECTIVES

1. Compare the following regions of the United States with similar regions in the Western Hemisphere: forest, desert, farming, ocean, manufacturing, trading, and political.

2. Describe the advantages and disadvantages of the geographical location, natural features, and natural resources of Mexico, Central America, the West Indies, South America, and North America.

3. Identify on maps, the major land forms, physical regions, major rivers, and mountain chains of the Western Hemisphere.

4. Describe elevation by distinguishing colors on a relief map.

5. Use maps to explain the geographic setting of historical and current events.

STANDARD 3

The students will explain how patterns of buying and selling relate to economic choices and ultimately to available resources.

OBJECTIVES

1. Analyze how changes in the cost or availability of resources can change the supply and market price of a product.
2. Explain how changes in incomes and people's tastes can influence the demand and market price of a product.
3. Evaluate how competition among producers tends to increase the quality of products and lower the prices to consumers.
4. Explain that consumers have rights and responsibilities in the market place.
5. Show how individual skills can be utilized in many occupations.

STANDARD 4

The students will analyze the basic functions of government and citizenship at the national and international levels.

OBJECTIVES

1. Explain the scope and limits of freedom in a democratic society.
2. Describe how our representative form of government gives authority to elected and appointed leaders to make decisions and how the citizen can be involved in this process.
3. Identify major values in the Declaration of Independence, Constitution, and Bill of Rights.
4. Discuss the function of our court system.
5. Show how peer group approval affects the individual's behavior and self-esteem.

STANDARD 5

The students will utilize a variety of speaking, listening, writing, reading, and citizenship skills in completing social studies activities.

OBJECTIVES

1. Write a conclusion about an historical event in order to formulate an idea for present and future events.
2. Read and analyze simple charts or graphs used in social studies.
3. Create individually, or in a group, one or more of the following: newspapers, posters, poetry, bumper stickers, interviews, surveys, bulletin boards, stories, letter writing, diaries, dialogues, or songs.
4. Interpret news items from a variety of sources.
5. Evaluate with other class members' right and wrong actions, according to universal standards, as being morally acceptable or unacceptable.

LEVEL 6

STANDARD 1

The students will analyze how the historical past of the Eastern Hemisphere influences the present.

OBJECTIVES

1. Identify the ancient "cradles of civilization."

2. Evaluate the contributions to our modern culture by one or more of the following ancient cultures: Egyptian, Greek, or Roman.

3. Compare cultures from different parts of the Eastern Hemisphere in terms of each of the following components:

   a. Political
   b. The arts
   c. Economical
   d. Social
   e. Nutritional
   f. Ethical

5. Analyze how cultures within societies of the Eastern Hemisphere have had conflicts which resulted in change.

STANDARD 2

The students will explain that every society has roles, norms, values, and sanctions to guide the behavior of individuals and groups within society.

OBJECTIVES

1. Identify the roles, norms, values, and sanctions of several countries in the Eastern Hemisphere and compare and contrast them with those of the United States.

2. Analyze the necessity of honesty in the home, business, school, church, and government.

STANDARD 3

The students will explain that the geographic features of places within the Eastern Hemisphere vary and contribute to their distinctiveness.

OBJECTIVES

1. Locate the continents and oceans of the world.
2. Locate the countries of Western Europe, the Soviet Union, Eastern Europe, Asia, Africa, the Far East, and the Middle East.
3. Describe the natural features and natural resources of: Western Europe, the Soviet Union, Eastern Europe, Asia, Africa, the Far East, and the Middle East.
4. Locate the major cities in the Eastern Hemisphere on a map.

STANDARD 4	The students will analyze some of the economic costs and benefits of an interdependent world.

OBJECTIVES

1. Describe the characteristics of the planned, traditional, and market economy models.
2. Identify one or more economic trends which are worldwide and which are likely to impact on future occupational choices and living styles.
3. Evaluate the economic characteristics of socialism, communism, and free enterprise.

STANDARD 5	The students will analyze how governments make decisions and settle conflicts.

OBJECTIVES

1. Describe the various ways leaders are elected, appointed, or designated in several Eastern Hemisphere countries.
2. Discuss ways that particular groups use political systems to represent and promote their interests.
3. Model appropriate democratic principles and practices to students in the school.
4. Apply the concept of cultural diversity to two areas of the world.

STANDARD 6	The students will utilize a variety of speaking, listening, writing, reading, and citizenship skills in completing social studies activities.

OBJECTIVES

1. Distinguish between personal opinions, values, and factual information.
2. Explain why individual decisions may or may not be accepted by others.
3. List possible outcomes and alternative solutions to a given problem.
4. Read two opposing viewpoints on one topic and identify similarities and differences.
5. Rephrase information taken from reference materials.
6. Identify and use a variety of resource materials to complete a research project.
7. Cite common historical or cultural themes developed in classic pieces of literature.

LEVELS 7 - 8

COURSE TITLE	UNITS OF CREDIT	PREREQUISITES
Utah Studies	.5	None

COURSE DESCRIPTION

The students will be introduced to a study of the significant events, people, diverse cultures, and issues that have influenced the development of Utah. The course will focus on historical, social, political, economic, and geographical factors with attention to the development of higher level thinking skills.

STANDARD 1

The students will explain that the history of Utah represents its cultural heritage and that the various people and cultures of all historical periods have made contributions to Utah.

OBJECTIVES

1. List the contributions of the major Indian groups to Utah's development.
2. List the contributions of the early Spanish explorers to Utah (Escalante, Dominguez, Cardenas, and Rivera).
3. Analyze contributions made to Utah's history by the mountain men (Jedediah Smith, Peter S. Ogden, Etienne Provost, William Ashley, Jim Bridger, Joseph R. Walker, James Beckworth, and Antoine Robidoux).
4. List the purposes and contributions made by government explorers such as Fremont, Gunnison, Stansbury, Powell, and Beckwirth.
5. Explain contributions of religious, ethnic, and cultural groups to the development of the state.
6. Demonstrate an awareness of the contributions of the military, industry, and mining to the development of the state.
7. Evaluate our cultural heritage through examining architecture, journals, manuscripts, photography, the arts, and folklore of Utah.
8. Describe the contributions of women to Utah's development.

STANDARD 2

The students will identify the major geographic features of Utah.

OBJECTIVES

1. Locate on the map, the three physiographic provinces of Utah (Colorado Plateau, Rocky Mountains, and Great Basin).
2. Locate on a map of Utah the following major rivers: Colorado, Green, Bear, San Juan, Virgin, Sevier, Provo, Weber, and Jordan.
3. Locate on a map of Utah the following major mountain ranges: Wasatch, Uintah, and Oquirrh.
4. Locate on a map of Utah the following major bodies of water: Great Salt Lake, Utah Lake, Bear Lake, Lake Powell, Flaming Gorge, Sevier Lake, and the Strawberry Reservoir.
5. Label rainfall, resources, population, and vegetation on a map of Utah.

STANDARD 3

The students will discuss the similarities and differences of Utah's government to other states and to the federal government.

OBJECTIVES

1. Describe the development, structure, and services of local government in Utah.
2. Describe the structure and function of Utah's state government to include the executive, legislative, and judicial branches.
3. Compare the structure of the federal government with those of state and local governments in Utah.
4. Demonstrate how a citizen can effectively participate in government at the state and federal levels.
5. Identify the major elements of the Utah Constitution and explain how it functions.
6. Identify problems and formulate possible solutions relating to issues which exist in Utah, i.e., urban and rural development, water and energy resources, the effects of technology and social issues.

STANDARD 4	The students will evaluate how economic decisions, whether by individuals or groups, can affect the total economy of Utah.

OBJECTIVES

1. Evaluate the effects of Utah's geography, politics, and technology on economic decisions.
2. Describe the effect of one economic decision on another, i.e., urban growth, conservation, nuclear storage, environmental protection.

STANDARD 5	The students will demonstrate the ability to think critically, through speaking, listening, writing, and reading.

OBJECTIVES

1. Use analogies in speech and writing.
2. Distinguish between relevant and irrelevant information in determining solutions to problems.
3. Predict outcomes and analyze causal factors.
4. Make logical conclusions through speaking and writing.
5. Construct a timeline.
6. Demonstrate note-taking skills.
7. Use primary sources, i.e., oral history, manuscripts, on-site investigations, journals, and newspapers in studying state and local history.
8. Examine their own values and compare them to the predominant values of their cultural environment.

COURSE TITLE	UNITS OF CREDIT	PREREQUISITES
United States History	1.0	None

COURSE DESCRIPTION

The students will be introduced to a study of U.S. history from colonization to and including the present. The course will focus on the "Epic of America," the development of the United States as a strong and free nation. The primary emphasis at this level should be the social history and economic development of the country. The course will include a unit of study on the process and structure of democratic governance including the Constitution. The student's responsibility to the law will be emphasized.

STANDARD 1

The students will evaluate how the American heritage reflects diverse cultures.

OBJECTIVES

1. Describe contributions made by the American Indians prior to the exploration period.
2. Analyze the various cultures prevalent in the United States.
3. Identify the major contributions of religious and ethnic groups to the development of the country.
4. Analyze the changing role of women in United States history.

STANDARD 2

The students will evaluate why the events and acts in American history reflect the development of the beliefs and attitudes of the people of the United States.

OBJECTIVES

1. Analyze the major historical social, economic, and political factors responsible for European exploration of North America.
2. Analyze the discoveries and contributions made by European explorers to the New World.
3. Compare the social, economic and political motivations influencing American colonization to 20th century immigration.

4. Relate the origin of American ideals, the concepts of liberty, and freedom to present day applications.
5. Explain how the constitution is the basis for today's legal system.
6. Evaluate the causes and outcomes of various wars involving the United States.
7. Evaluate how westward expansion brought both progress and problems for the United States.
8. Describe the social, political, and economic differences between the North and the South before the Civil War.
9. Explain how laws and the interpretation of constitutional rights have evolved in response to the Civil Rights movement.
10. Analyze the industrial and technological development in the United States and discuss their effects on transportation, communication, business, and labor.
11. Describe the impact on American life that various historical figures have made.
12. Describe how the United States has changed since World War II.
13. Trace the relationships of the United States with other leading world powers.

STANDARD 3	The students will identify the major geographic features of the United States.

OBJECTIVES

1. Locate the great plains, major rivers and bodies of water, and mountain ranges in the United States.
2. Identify the 50 states and their capitals on a map.
3. Locate the bordering countries, oceans, and natural resources of the United States.

STANDARD 4

The students will evaluate how economic decisions and experiences of the people of historical America influenced the development of the nation.

OBJECTIVES

1. Define economic terms (i.e., scarcity, opportunity cost, demand, supply, market price, etc.) and cite examples from United States history.
2. Evaluate how various government regulations of the economy have affected business operations, personal liberty, the political structure, and the free enterprise system.
3. Evaluate the characteristics and benefits of the American economic system.
4. Describe why economic conditions have fluctuated in the history of the United States.

STANDARD 5

The students will evaluate why our democratic government was established to provide for the general welfare of its citizens.

OBJECTIVES

1. Evaluate the principles expressed in the Declaration of Independence, i.e., equality, natural rights, and responsibility of government.
2. Identify the major elements of the United States Constitution (e.g., Preamble, articles, and amendments) and apply them to current issues.
3. Explain how our legal system has been greatly affected by the rights and restraints of the Bill of Rights.
4. Identify the purpose and role of government in a constitutional republic.
5. Discuss the basic constitutional principles in Amendments 11 through 26.

STANDARD 6

The students will demonstrate the ability to utilize critical thinking and decision making skills in completing social studies activities.

OBJECTIVES

1. Identify their own personal values and compare them to basic American values.
2. State or write possible solutions to an issue/problem.
3. Critically examine information from various sources (media center, notes, television, radio, interviews, etc.).
4. Apply law-related and citizenship education concepts to events that occurred in United States history.
5. Analyze graphs, charts, tables, diagrams, time lines, and cartoons.

LEVELS 9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
World Cultural Geography, Part I	.5*	None

COURSE DESCRIPTION

The course will focus on a study of the interrelationships between our physical and cultural worlds. The course will explore how geography influences human behavior from the local to the international level. Cultural, economic, and political geography will be emphasized. Representative groups from various parts of the world will be examined. Selected geographical skills will be taught.

* Districts must require .5 unit of credit for World Cultural Geography. An additional .5 unit of credit in World Cultural Geography may be acquired as a core option.

STANDARD 1

The students will evaluate how the natural environment affects the way people live.

OBJECTIVES

1. Discuss the components of location, climate, and landform and describe how each of the three affects the way people live.
2. Explain and evaluate the differences between environmental determinism, possibilism, and probablism.
    - a. Environmental determinism declares that the physical or natural environment is the most important ingredient in determining man's development and behavior. Climate is regarded as the most important physical element.
    - b. Possibilism explains life-style differences among places where the physical environments are similar.
    - c. Probablism states that people, not nature, are the most important components of an environment. People select what they want from among the wide range of possibilities contained within most physical environments.

STANDARD 2	The students will evaluate how groups develop beliefs, values, traditions, and skills that can be called cultural.

OBJECTIVES

1. Define culture.
2. Identify beliefs, values, skills, and traditions as an integral part of a group.
3. Identify the cultural contributions that have been made by groups studied.

STANDARD 3	The students will evaluate how the changing needs and values of groups modify social systems.

OBJECTIVES

1. List the changing needs and values of groups that are the result of cultural, political, economic, and environmental changes.
2. Describe and analyze the roles of women in the various groups studied.
3. Determine what causes population to grow and decline.

STANDARD 4	The students will explain how choices made by groups in adapting to their environment are influenced by economic resources and the level of technological development.

OBJECTIVES

1. Locate the most important economic resources of the world.
2. Identify ways in which resources are disseminated throughout the world in countries studied.

3. Describe how the use of technology and resources influence the adaptation of people to their environment.

4. Develop a plan which proposes alternative courses of action for the use and conservation of resources.

5. Describe the major problems confronting the underdeveloped and developed countries.

STANDARD 5	The students will develop selected geographical skills.

OBJECTIVES

1. Identify the major map projections and explain the advantages and disadvantages of each.

2. Be able to make and to read maps.

3. Locate the primary physical features and countries of the world on various maps or globes.

4. Locate the countries in regions studied.

5. List the common cultural characteristics of areas studied.

6. Analyze the political, economic, and social conflicts that have affected the countries studied.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Ancient World Civilizations	.5*	None

COURSE DESCRIPTION

Students will learn about the contributions of major cultures and societies in the ancient world. The course stresses the diverse economic, political, religious, and social systems. Historical perspective should be provided on major world events and movements. Students should develop a knowledge of and an appreciation for the contributions of many cultures to the collective wisdom of the human race. The course should include attention to those historical differences among people that lead to conflict. The course is basically history and should include the development of tools of historical analysis. (Advanced Placement European History may satisfy this requirement.)

* Districts must require .5 unit of credit for Ancient World Civilizations. An additional .5 unit of credit in Modern World Civilizations may be acquired as a core option.

STANDARD 1	The students will examine how cultures and civilizations of the ancient past have contributed to and are reflected in contemporary societies of the world.

OBJECTIVES

1. List the time periods and/or topical subject headings into which ancient world history is often divided.

   a. Prehistoric
   b. Early
   c. Classical
   d. Middle Ages

2. Identify means by which civilizations transmit their culture from one generation to the next.

3. Relate how past civilizations contributions have contributed to contemporary societies.

4. Analyze current world situations in terms of their historic backgrounds and discuss projections for the future.

5. Analyze the contributions made to society by outstanding historical leaders.

STANDARD 2

The students will demonstrate an understanding of why conflict occurs and how conflict is resolved.

OBJECTIVES

1. Analyze the following causes of conflict: cultural differences, political differences, scarcity of goods and services, and value differences.

2. Evaluate the various ways people resolve conflict.

STANDARD 3

The students will identify the beliefs, knowledge, values, traditions, and technology that represent the cultures of the civilizations studied.

OBJECTIVES

1. Describe how values, traditions, knowledge, and technology are manifested in a culture.

2. Describe the origins and beliefs of the varied world religions including: Confucianism, Christianity, Buddhism, Islam, Hinduism, and Judaism.

3. Exhibit respect for the dignity and worth of all peoples.

4. Explain that social systems change because of the changing needs and values of groups within a society.

STANDARD 4

The students will evaluate choices made by people in adapting to their environment which depend upon economic resources and levels of technology.

OBJECTIVES

1. Describe the characteristics of the traditional, planned, and market economies and compare these models to real world economic systems.

2. Explain how utilization of economic resources is a means of adaptation to the environment.

3. Explain effects of economic cycles on political and historical events.

4. Analyze how the need for increased production and distribution has made the civilizations of the world interdependent.

STANDARD 5	The students will identify systems of governments that vary according to their values, traditions, and beliefs.

OBJECTIVES

1. Compare and contrast various systems of government to include democracy, communism, socialism, dictatorships, dynasties, monarchies, oligarchies, aristocracies and describe the advantages and disadvantages of each.

2. Outline the development, effectiveness, and limitations of co-operative world organizations to include: United Nations, League of Nations, European World Market, etc.

STANDARD 6	The students will demonstrate the ability to think critically and to employ basic study skills.

OBJECTIVES

1. Identify historical bias.

2. Distinguish between facts, inferences, estimates, and value judgements.

3. Use the scientific method in analyzing social science issues:

   a. Defining the problem
   b. Setting up the hypothesis
   c. Listing possible solutions and alternatives
   d. Testing hypothesis and predicting outcome
   e. Forming conclusions

4. Use the case study method in analyzing social and legal issues to include:
    a. Facts.
    b. Issues.
    c. Arguments.
    d. Decisions.

5. Demonstrate the ability to tolerate different points of view.

6. Identify and locate various sources of historical information and evaluate the reliability and relevance of these sources.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
United States Studies	1.0	None

COURSE DESCRIPTION

This course devotes attention to economic, social, and political developments in United States history; it also develops an understanding of the constitution, the legal system, and appreciation of ethical considerations supported by the American society. Students will identify ways to solve problems, make decisions, and participate as an effective citizen of the United States. (Advanced Placement American History may satisfy this requirement.)

STANDARD 1

The students will evaluate how history in various periods of time and particularly in contemporary society has affected people.

OBJECTIVES

1. Identify important persons, events, and themes in United States history and government from the Age of Discovery to the present including:

    a. Discovery and Colonization.
    b. Revolutionary Period.
    c. Foundations of the Nation.
    d. Sectionalism, Civil War, and Reconstruction.
    e. Industrialization.
    f. Westward Movement.
    g. Nationalism/Imperialism.
    h. World Wars and Conflicts.
    i. Depression and New Deal
    j. Contemporary Issues.

2. Describe conflicts and accommodations between industry and labor in United States history including the labor union movement.

3. Describe the experiences and contributions of ethnic minorities and immigrant groups.

4. Analyze America's interrelationships with other nations from its birth to the present.

5. Recognize the growth and evolution of the legal system as integral to major events in United States history.

STANDARD 2	The students will demonstrate an understanding of the structure and process of democratic governance and the qualities of responsible citizenship.

OBJECTIVES

1. Outline the structure and functions of the federal, state, and local governments and recognize their bases in the United States Constitution.

2. Participate in government and law related activities, e.g., class and school elections, mock elections, mock legislatures, mock trials, court tours, and direct onsite experiences with government leaders.

3. Describe the processes through which government officials are elected, appointed, or removed from public office.

4. Identify the primary characteristics of the United States civil, criminal, and juvenile justice systems, and the role law played in the development of United States history, i.e., court decisions, amendments, and social policy.

5. Describe citizens' rights and responsibilities under the law.

6. Demonstrate respect for the moral and legal rights and basic freedoms of all people.

7. Describe how to participate in government at all levels (i.e., voting, knowing state and federal representatives, locating sources to voice opinions or concerns).

STANDARD 3	The students will evaluate why varying economic pressures have been determining factors in the utilization of American resources in the free enterprise system.

OBJECTIVES

1. Review, analyze, and evaluate various personal and social decisions by applying the appropriate basic economic concepts which shall include the following:

   Scarcity
   What, how, and for whom to produce
   Opportunity costs

Circular flow
Supply and demand and changes in supply and demand
Market price
Shortages and surpluses
Profit and loss

2. Compare the effects of monopolistic and competitive firms in an economic system.

3. Define money and explain its functions.

4. Explain the process by which banks create money.

STANDARD 4	The students will evaluate how the United States has adjusted to meet changing needs and conditions.

OBJECTIVES

1. Describe how several major economic panics or depressions led to changes in the lives of Americans.

2. Discuss how industrialization and organization have affected life-styles in the United States.

3. Analyze changes in political loyalty and leadership and how they have affected the lives of United States citizens.

4. Evaluate the contributions of women, children, the aged, and other special interest groups in United States history.

STANDARD 5	The students will evaluate how the development of the United States has been influenced by adaptation to its geographic location and use of its natural resources.

OBJECTIVES

1. Compare various maps to identify which type is most appropriate to show the geographic setting of historical and current events.

2. Identify and locate on a map or globe the major physical features of the United States.

3. Evaluate the importance of natural resources to the nation.

4. Describe the impact of topography and environment on the evolution of the nation's economic and political systems.

5. Discuss recent environmental problems created by ecological imbalance.

STANDARD 6

The students will demonstrate the ability to think critically and to employ basic study skills.

OBJECTIVES

1. Identify historical bias.

2. Distinguish between facts, inferences, estimates, and value judgments.

3. Use the scientific method in analyzing social issues by:

    a. Defining the problem.
    b. Setting up the hypothesis.
    c. Listing possible solutions and alternatives.
    d. Testing hypothesis and predicting outcome.
    e. Forming conclusions.

4. Use the case study method in analyzing historic, social, and legal issues to include:

    a. Facts.
    b. Issues.
    c. Arguments.
    d. Decisions.

5. Demonstrate the ability to tolerate differing points of view.

6. Demonstrate the ability to participate in a variety of group roles and situations.

7. Write an abstract of participatory experiences in democratic governance.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
American Government/Law (Core Option)	.5*	None

COURSE DESCRIPTION

This course introduces students to a study of ideas and philosophies of American government and law; a study of the Constitution, an understanding of the American political and legal system, and the responsibilities of citizenship. The course will provide application of knowledge and attitudes in the areas of responsibility, law and justice, rights, governmental functions and process, and civic participation. Emphasis will be given to ways the student can become an active, concerned, and knowledgeable citizen.

*This course is a core option and may be offered for .5 or 1.0 unit of credit.

STANDARD 1

The students will be knowledgeable about their rights and responsibilities as citizens.

OBJECTIVES

1. Explain that as American citizens, individuals have a right to participate in the processes by which they will be governed.
2. Identify basic responsibilities of good citizenship in our society and explain their relationships to the citizen in the political and legal processes.
3. Identify the protected rights of the first Ten Amendments and explain the exceptions to those guarantees.
4. Differentiate between the terms "democracy" and "republic" and explain values basic to both concepts such as liberty, justice, equality, consent of the governed.
5. Explain the meaning of due process.
6. Explain that ours is a participating government and that society's stability depends largely on voluntary compliance with the law.
7. Describe the American concept of civil rights.

STANDARD 2

The students will describe the role and function of the three branches of government in American Society at the local, state, and federal level.

OBJECTIVES

1. Describe the structure and major functions performed by the federal, state, and local governments.
2. Outline the processes of making, enforcing, and interpreting law in the United States.
3. Explain how state and federal laws are passed.
4. Explain how values, beliefs, and traditions influence a nation's political system and governmental process.

STANDARD 3

The students will understand the history table of the American legal system, the United States Constitution, and the Bill of Rights.

OBJECTIVES

1. Outline the rights and freedoms guaranteed to American citizens in the United States Constitution and the Bill of Rights.
2. Understand how laws change, evolve, and reflect community mores.
3. Identify the benefits that a citizen receives from a system of law.
4. Understand the relationship as found in a daily newspaper of state, national, and world events to the evolution of law in the United States.
5. Identify ten landmark Supreme Court cases and explain their historic, social, and economic impact.

STANDARD 5

The students will understand the legal advocacy system in the United States.

OBJECTIVES

1. Explain several legal means of resolving conflict.

2. Explain the functions of the judicial system.

3. Understand basic court procedure in regard to lawyers, jurors, witnesses, and judges. Be able to implement the roles in a mock trial procedure.

4. Describe differences in philosophy and procedure of the juvenile and adult court systems.

5. Differentiate between civil and criminal law.

STANDARD 6	The students will demonstrate the ability to think critically and to employ basic study skills.

OBJECTIVES

1. Identify historical bias.

2. Distinguish between facts, inferences, estimates, and value judgments.

3. Utilize the scientific method in analyzing social issues by:

    a. Defining the problem.
    b. Setting up the hypothesis.
    c. Listing possible solutions and alternatives.
    d. Testing hypothesis and predicting outcome.
    e. Forming conclusions.

4. Utilize the case study method in analyzing historic, social, and legal issues to include:

    a. Facts.
    b. Issues.
    c. Arguments.
    d. Decisions.

5. Demonstrate the ability to tolerate differing points of view.

6. Demonstrate the ability to participate in a variety of group roles and situations.

7. Write an abstract of participatory experiences in democratic governance.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Economics (Core Option)	.5*	None

COURSE DESCRIPTION

The course focuses on a study of economic problems and the methods by which societies solve them; characteristics of the market economy of the United States and its function in the world; methods of applying economics to one's personal life.

*This course is a core option which may be offered for either .5 or 1.0 unit of credit.

STANDARD 1

The students will apply basic economic principles in solving economic problems.

OBJECTIVES

1. Evaluate the various methods used in answering economic questions.
2. Discuss the importance of values and goals in making economic decisions.
3. Describe the nature and cause of business cycles.
4. Explain why the gross national product is considered a good gauge of the national economic health.
5. Differentiate between macroeconomics and microeconomics.
6. Evaluate the advantages and disadvantages of the basic forms of business ownership (proprietorship, partnership, and corporation).
7. Outline ideas for alleviating the problems of unemployment, inflation, deficit spending, and recession.
8. Analyze the trade-offs between economic growth, security, and freedom.

STANDARD 2	The students will evaluate the operations of the market economy of the United States.

OBJECTIVES

1. Describe the primary factors of production (land, labor, and capital).
2. Explain how free enterprise answers the basic economic questions: What goods and services are to be produced? How shall they be produced? For whom shall they be produced?.
3. Tell what capitalism is and describe the three basic foundations upon which it rests (private property, private enterprise, and freedom of choice).
4. Explain how the four major groups in a capitalist economy are interdependent (entrepreneur, managers, workers, and consumers).
5. Describe the four types of markets found in the United States (pure monopoly, oligopoly, monopolistic competition, and pure competition).
6. Explain the operation of supply and demand in the market economy of the United States.

STANDARD 3	The students will explain the role currently being played by government in economic activities.

OBJECTIVES

1. Evaluate how monetary policy and money supply may effect our economy.
2. Explain the use of fiscal policy and how it may effect our economy.
3. Describe the most common types of taxes levied by the government.
4. Analyze the burden of carrying the federal debt.
5. Discuss what needs to be done in the future to achieve economic stabilization.
6. Explain the reasons for the historic change in the government's role in regulating the economy.

STANDARD 4

The students will analyze the international dimensions of economics.

OBJECTIVES

1. Identify three major reasons for world trade (resource, economic, and political reasons).
2. Explain the principles of absolute and comparative advantage.
3. Discuss the concept of balance of trade.
4. Explain the role the United States has played in world trade.
5. Compare and contrast the traditional market and command economies.

STANDARD 5

The students will apply what they have learned about economics to their personal lives as producers and consumers.

OBJECTIVES

1. Read and identify different points of view concerning economic theory and/or decisions.
2. Use analogies in speech and writing in determining solutions to economic problems.
3. Listen to and evaluate various sources of information in forming an opinion or course of action in solving an economic problem.
4. Modify opinions and solutions based on additional information.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Modern World Civilizations (Core Option)	.5*	None

COURSE DESCRIPTION

The course addresses the time frame from the Reformation to the present. The history of people not usually studied will also be examined, e.g., the Middle Easteners, the Africans, the Eastern Europeans, the Russians, and the Latin Americans. The course should include attention to those historical differences among people that lead to conflict. The course is basically history and should include the development of tools of historical analysis. (Advanced Placement European History may satisfy this requirement.)

* This course is a core option for .5 unit of credit.

STANDARD 1

The students will examine how cultures and civilizations of the past have contributed to and are reflected in contemporary societies of the world.

OBJECTIVES

1. Describe how the following make modern civilizations different from civilizations of early times.
   - a. Scientific knowledge
   - b. Economic interdependence
   - c. Humane feeling and democratic ideas
   - d. Nationalism
   - e. Internationalism
2. Outline the time periods and/or topical subject headings into which modern world history is often divided.
   - a. Renaissance
   - b. Reformation
   - c. Revolution
   - d. Colonialism
   - e. Nationalism
   - f. Industrialism
   - g. Imperialism
   - h. World conflict
   - i. Contemporary
3. Identify means by which civilizations transmit their culture from one generation to the next.
4. Relate how past civilizations' political, technological, and cultural contributions have contributed to contemporary societies.

5. Analyze current world situations in terms of their historic backgrounds and discuss projections for the future.

6. Evaluate the contributions made to society by outstanding world leaders.

STANDARD 2 - The students will demonstrate an understanding of why conflict occurs and how conflict is resolved.

OBJECTIVES

1. Analyze the following causes of conflict: cultural differences, political differences, scarcity of goods and services, and value differences.

2. Evaluate the various ways people resolve conflict.

STANDARD 3

The students will identify the beliefs, knowledge, values, traditions, and skills that represent the cultures of the civilizations studied.

OBJECTIVES

1. Describe how values, traditions, knowledge, and skills are manifested in a culture.

2. Describe the origins and beliefs of the varied world religions including: Confucianism, Christianity, Buddhism, Islam, Hinduism, and Judaism.

3. Exhibit respect for the dignity and worth of all peoples.

4. Explain that social systems change because of the changing needs and values of groups within a society.

STANDARD 4

The students will evaluate choices made by people in adapting to their environment which depend upon economic resources and levels of technology.

OBJECTIVES

1. Describe the characteristics of the traditional, planned, and market economies and compare these models to real world economic systems.
2. Explain how utilization of economic resources is a means of adaptation to the environment.
3. Explain effects of economic cycles on modern political and historical events.
4. Analyze how the need for increased production and distribution has made the civilizations of the world interdependent.

STANDARD 5	The students will identify systems of government that vary according to their values, traditions, and beliefs.

OBJECTIVES

1. Compare and contrast various systems of government to include democracy, communism, socialism, dictatorships, dynasties, monarchies, oligarchies, aristocracies and describe the advantages and disadvantages of each.
2. Outline the development, effectiveness, and limitations of cooperative world organizations to include: United Nations, League of Nations, European World Market, etc.

STANDARD 6	The students will demonstrate the ability to think critically and to employ basic study skills.

OBJECTIVES

1. Identify examples of historical bias.
2. Distinguish between facts, inferences, estimates, and value judgements.
3. Use the scientific method in analyzing social science issues:
    a. Defining the problem.
    b. Setting up the hypothesis.

   c. Listing possible solutions and alternatives.
   d. Testing hypothesis and predicting outcome.
   e. Forming conclusions.

4. Use the case study method in analyzing social and legal issues to include:

   a. Facts.
   b. Issues.
   c. Arguments.
   d. Decision.

5. Demonstrate the ability to tolerate different points of view.

6. Identify and locate various sources of historical information and evaluate the reliability and relevance of these sources.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Psychology (Core Option)	.5*	None

COURSE DESCRIPTION

This course introduces the student to the story of the behavior of individuals. It emphasizes the manner in which the individual can apply various psychological theories and concepts to better understand one's self, one's motives, and one's relationships with other people.

*This course is a core option and may be offered for either .5 or 1.0 unit credit.

STANDARD 1	The students will master the major concepts and theories in psychology.

OBJECTIVES

1. Define psychology, and relate it to the other social sciences.
2. Identify the major psychological theories and theorists (i.e., Freud, psychoanalysis, behaviorism, humanism--Adler, Skinner).
3. Compare the following theories and personalities: psychoanalytic, social learning, humanistic.
4. Identify psychological principles of heredity.
5. Describe psychological principles influenced by the environment.
6. Apply key terms of psychology (e.g., positive reinforcement, super ego, psychoanalysis, instinct, preception, therapy) to major theories and theorists.
7. Describe patterns of behavioral and emotional development.

STANDARD 2	The students will demonstrate an understanding of various methods and instruments used to measure personality and intelligence.

OBJECTIVES

1. Define what intelligence is and the formula for determining it.

2. Describe the major tests of intelligence and list what they measure.

3. Describe the major instruments used to measure personality.

4. Conduct simple psychological experiments.

5. Discuss characteristics of mental retardation and superior intelligence.

STANDARD 3	The students will examine the problems and corrective programs dealing with abnormal psychological issues.

OBJECTIVES

1. Itemize various neuroses, psychoses, and personality disorders.

2. Assess the use and effectiveness of various methods of therapy.

3. Discuss the causes, problems, and treatment of alcoholism and drug addiction.

4. Discuss the major psychological problems associated with such problems as: aging, death and dying, physical handicaps, etc.

STANDARD 4	The students will demonstrate an understanding of how the principles of learning contribute to personality development.

OBJECTIVES

1. Discuss various definitions of learning.

2. Discuss various types of learning conditioning (operant, classical, reward, and punishment, etc.).

3. Analyze how prejudice develops and how it can be reduced.

4. Discuss the influence of biology and behavior on learning.

STANDARD 5	The students will demonstrate the ability to think critically and to employ basic study and social skills to psychology.

OBJECTIVES

1. Read and identify different points of view concerning psychological theory and/or decisions.

2. Listen to and evaluate various sources of information in forming an opinion or course of action in solving a psychological problem.

3. Analyze biases which relate to psychological issues in society.

4. Use the scientific method in analyzing social issues by:

    a. Defining the problem.
    b. Setting up the hypothesis.
    c. Listing possible solutions and alternatives.
    d. Testing hypothesis and predicting outcome.
    e. Forming conclusions.

5. Demonstrate the ability to participate in a variety of group roles and situations.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Sociology (Core Option)	.5*	None

COURSE DESCRIPTION

This course introduces the student to the principles of sociology. Students will study society, one's role in it, issues and problems, social change, and social movements. A study of basic institutions including the family, community, political, and social organizations.

*This course is a core option which can be offered for either .5 or 1.0 unit of credit.

STANDARD 1	The students will understand how society is structured and how it functions.

OBJECTIVES

1. Define sociology and describe the kinds of problems sociologist attempt to analyze.
2. Students will explain sociological terms including: sanctions, roles, socialization, stratification, culture, role conflict, ethnocentrism, collective behavior, and social class.
3. Distinguish between ascribed and achieved status.
4. Identify cultural norms and mores.
5. Explain why culture is a main ingredient of societies.

STANDARD 2	The students will examine how their lives are influenced by social institutions.

OBJECTIVES

1. Identify the five major social institutions of society.
2. Explain why the family has such an in important influence in their lives.
3. Analyze the impact of political institutions on our society.

4. Give examples of primary and secondary groups in our society.
5. Explain the role that religious institutions play in our society.
6. Evaluate how social change has affected science and technology.
7. Identify how social movements are affected by social change.

STANDARD 3	The students will understand societal issues and problems and develop possible solutions.

OBJECTIVES

1. Identify various social problems which existed in various periods of American history and compare them to those of contemporary America.
2. Compare the social problem of poverty in the United States with other countries in the world and develop possible solutions.
3. Discuss the common problems and issues of aging and describe possible ways of providing for the aged.
4. Describe three approaches for reducing crime.
5. Formulate an hypothesis which explains why divorce has become more common in the last 20 years.
6. Analyze the problem of prejudice and suggest ways of decreasing it in the United States.
7. Identify methods of helping those who abuse alcohol and drugs and help develop individual responsibility in preventing self-abuse of alcohol and drugs.
8. Describe the social problem that minorities and women face in contemporary America.

STANDARD 4	The students will use a variety of research and experimental models in addressing sociological topics.

OBJECTIVES

1. Conduct a sociological survey.
2. Use the scientific method to conduct a sociological experiment.
3. Explain the purpose of the participant observation research model.
4. Explain the use of sociograms and sociometry as research methodologies.

STANDARD 5	The students will demonstrate the ability to think critically and to employ basic study and social skills to sociology.

OBJECTIVES

1. Analyze biases which relate to sociological issues in society.
2. Distinguish between facts, inferences, estimates, and value judgments.
3. Demonstrate the ability to tolerate different points of view.
4. Demonstrate the ability to participate in a variety of group situations and activities.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
World Cultural Geography, Part II (Core Option)	.5*	World Curltural Geography, Part I

COURSE DESCRIPTION

This course focuses on a study of the interrelationships between our physical and cultural worlds. The course will explore how geography influences human behavior from the local to the international level. Cultural, economic, and political geography will be emphasized. Representative groups from various parts of the world will be examined. Selected geographical skills will be taught.

* This course is a core option [illegible] may be offered for .5 unit of credit.

STANDARD 1	The students will evaluate how the natural environment affects the way people live.

OBJECTIVES

1. Explain how the physical environments influences the level of development various cultures.

2. Explain how groups modify or control the effect of the physical environment on them.

STANDARD 2	The students will evaluate how groups develop beliefs, values, traditions, and skills that can be called cultural.

OBJECTIVES

1. Identify the cultural contributions that have been made by geographic regions and groups studied.

2. Discuss how historical geography is important to contemporary groups.

3. Compare how various cultures develop their beliefs, values, traditions, and skills.

4. Evaluate the differences between independent invention and cultural diffusion.

STANDARD 3

The students will evaluate how the changing needs and values of groups modify social systems.

OBJECTIVES

1. Describe and analyze the roles of women in the various groups studied.
2. Demonstrate an understanding of ethnocentrism and give examples for each major group studied.
3. Discuss causation factors that might bring about unification of diverse groups.

STANDARD 4

The students will understand how increased production and specialization have made the people of the world more interdependent.

OBJECTIVES

1. Explain how comparative advantage for more trade effects world trade.
2. Identify an example of the economic interdependence of people of the world.
3. Propose alternative courses of action for the use and conservation of resources in various world settings.

STANDARD 5

The students will describe how the geography of various countries influence political decisions.

OBJECTIVES

1. Identify how topography, climate, and location influence how countries are governed.

2. Describe specific problems that third world countries in governing themselves in contrast to major or world powers.

STANDARD 6

The students will develop selected geographical skills.

OBJECTIVES

1. Locate the countries in regions studied.
2. List the common cultural characteristics of areas studied.
3. Analyze the political, economic, and social conflicts that have affected the countries studied.

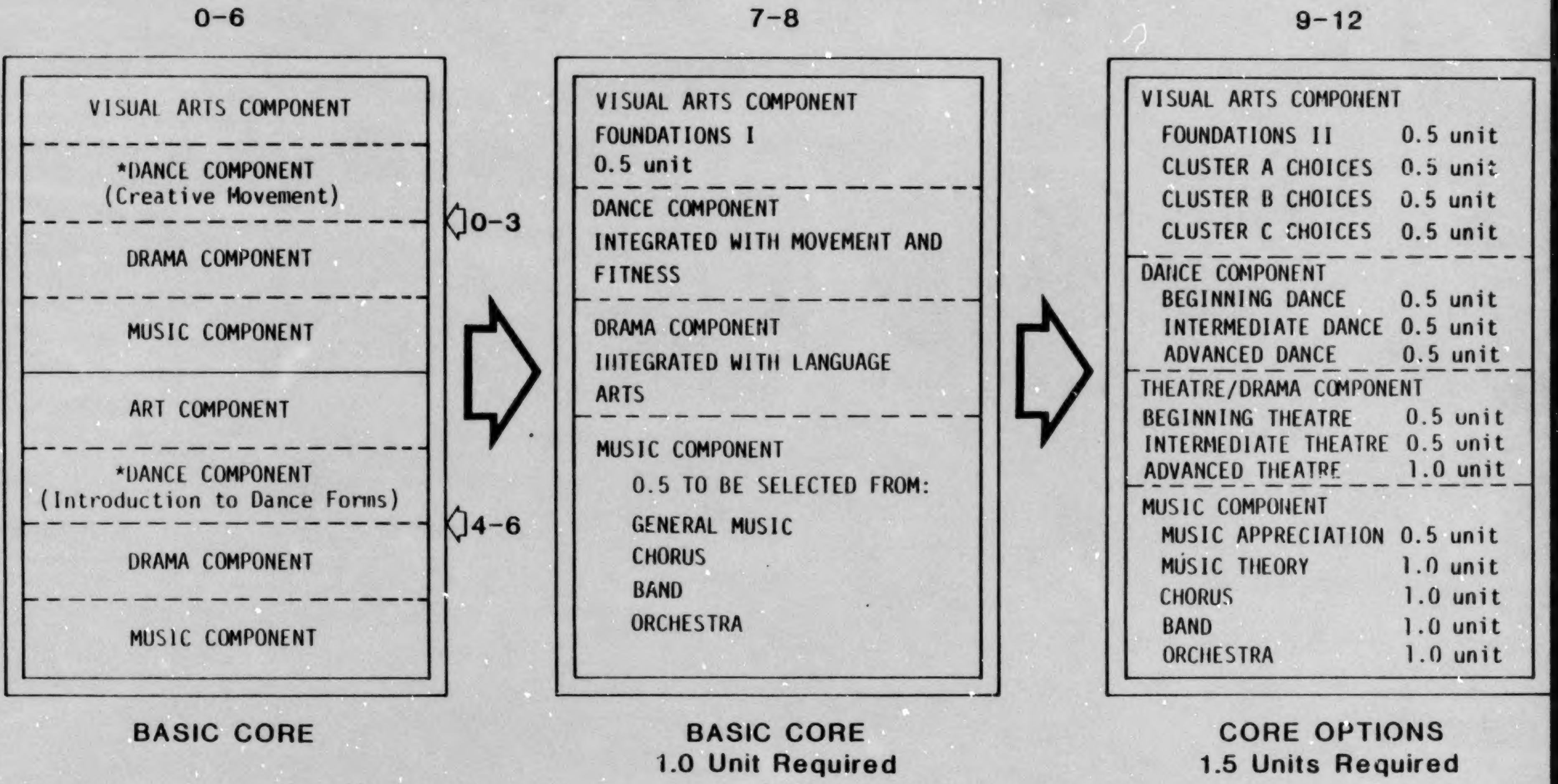
Section E

THE ARTS

RECOMMENDED

FIELD TRIAL

ARTS COURSE CHART



0-6

VISUAL ARTS COMPONENT

*DANCE COMPONENT (Creative Movement)

DRAMA COMPONENT

MUSIC COMPONENT

0-3

ART COMPONENT

*DANCE COMPONENT (Introduction to Dance Forms)

DRAMA COMPONENT

MUSIC COMPONENT

4-6

BASIC CORE

7-8

VISUAL ARTS COMPONENT
FOUNDATIONS I
0.5 unit

DANCE COMPONENT
INTEGRATED WITH MOVEMENT AND FITNESS

DRAMA COMPONENT
INTEGRATED WITH LANGUAGE ARTS

MUSIC COMPONENT
0.5 TO BE SELECTED FROM:
GENERAL MUSIC
CHORUS
BAND
ORCHESTRA

BASIC CORE
1.0 Unit Required

9-12

VISUAL ARTS COMPONENT

FOUNDATIONS II	0.5 unit
CLUSTER A CHOICES	0.5 unit
CLUSTER B CHOICES	0.5 unit
CLUSTER C CHOICES	0.5 unit

DANCE COMPONENT

BEGINNING DANCE	0.5 unit
INTERMEDIATE DANCE	0.5 unit
ADVANCED DANCE	0.5 unit

THEATRE/DRAMA COMPONENT

BEGINNING THEATRE	0.5 unit
INTERMEDIATE THEATRE	0.5 unit
ADVANCED THEATRE	1.0 unit

MUSIC COMPONENT

MUSIC APPRECIATION	0.5 unit
MUSIC THEORY	1.0 unit
CHORUS	1.0 unit
BAND	1.0 unit
ORCHESTRA	1.0 unit

CORE OPTIONS
1.5 Units Required

FIELD TRIAL

CORE CURRICLUM FOR THE ARTS

K - 6

COURSE DESCRIPTION

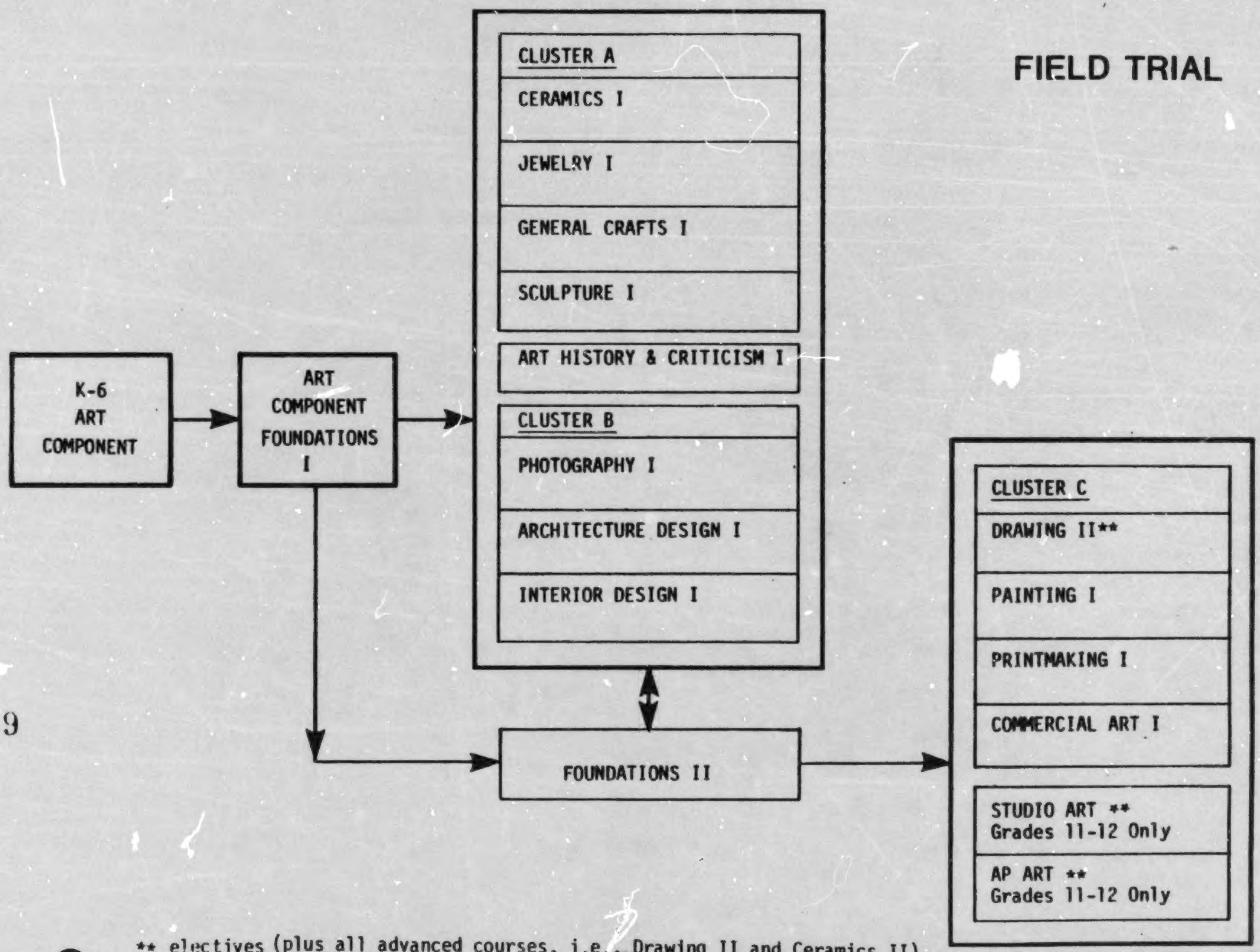
The arts in the core include visual arts, dance, drama, and music. Education in the arts should develop students' abilities in each of three roles--participant, observer/listener, and critic. These roles are distinct, yet complementary. Students' educations are limited if they master only one role; furthermore, each role requires a set of distinct skills which taken by itself is limited. When these skills are integrated, they provide the necessary and complete background for informed response in the arts.

We take a participant role when we deal actively and directly with the medium of an art form (e.g., acting, painting, singing, or dancing). We take an observer/listener role whenever we actively respond to a work of art. We take a critic role whenever we make informed judgments about works of art.

It is the ability to work well in each of these roles that will encourage informed and appreciative responses to the arts. We risk prejudice and ignorance without programs designed to create skills and understanding in each of these roles. The roles of participant, observer/listener, and critic provide direction in establishing standards and objectives for each of the arts.

K-12 ART COURSES AND PREREQUISITES

FIELD TRIAL


K-6 ART COMPONENT
ART COMPONENT FOUNDATIONS I
CLUSTER A
CERAMICS I
JEWELRY I
GENERAL CRAFTS I
SCULPTURE I
ART HISTORY & CRITICISM I
CLUSTER B
PHOTOGRAPHY I
ARCHITECTURE DESIGN I
INTERIOR DESIGN I
FOUNDATIONS II
CLUSTER C
DRAWING II**
PAINTING I
PRINTMAKING I
COMMERCIAL ART I
STUDIO ART **
Grades 11-12 Only
AP ART **
Grades 11-12 Only

** electives (plus all advanced courses, i.e., Drawing II and Ceramics II)

349

350

VISUAL ARTS COMPONENT

K - 3

PREFACE

We are essentially visual beings who learn more by sight than by any other means. For this reason, art education is profoundly basic to both general education and implied education. It is difficult to imagine an activity or even a thought that does not involve perception and imagery. In addition to our preparations for life, visual arts have a significant influence on our culture and family life via such things as advertising, industrial design, packaging, architecture, and clothing design.

The State Course of Study for Art Education covers 206 foundation objectives. Teachers and administrators have reviewed the 206 objectives and identified those that are critical to the fulfillment of the art education standards that follow. Additional objectives were added that this group felt were equally critical, and together the two groups of objectives became the core of the visual arts component.

LEVEL K

STANDARD 1	The students will develop skills vital to graphic expression by identifying and drawing the three basic shapes and simple variations of each, and by manipulating elementary art tools. (Participant)

OBJECTIVES

1. Draw the three basic shapes: circles, triangles, and rectangles (including squares).
2. Identify circular, triangular, and rectangular characteristics of common objects.
3. Improve primary motor skills by manipulating objects such as scissors, glue dispensers, brushes, crayons, and pencils.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by identifying basic colors and color families. (Observer/Listener)

OBJECTIVES

1. Point to an object and state its color. Point to a picture of an object and state its color.
2. Point to an object and name its color family. Point to a picture of an object and name its color family.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by comparing objects in terms of size, color, shape, texture, and position. (Critic)

OBJECTIVES

1. State how objects are alike or different with respect to size, color, shape, texture, or position. Compare objects in pictures from various cultures.
2. Classify objects as "rough or smooth," both by feeling and by viewing objects or pictures of objects.

LEVEL 1

STANDARD 1

The students will develop skills vital to graphic expression by identifying cast shadows, showing facial expressions in drawing, creating simple clay forms, and comparing size relationships of common objects or living things. (Participant)

OBJECTIVES

1. Identify shadows cast by people and objects.
2. State whether a given object is larger, smaller, or the same size when compared to their own bodies.
3. Create clay forms with the parts fused together, e.g., animals, plants, airplanes, etc.
4. Draw faces that show happiness, sadness, or other expressions.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by telling how colors may be mixed and how the value of a color may be altered and by understanding the term balance as it relates to art. (Observer/Listener)

OBJECTIVES

1. Predict what colors will result from mixing any two primary colors. Look at an art print and tell what colors the artist mixed to paint a particular object in that picture.
2. Add black or white to a color to change its value.
3. Point to an example of a color in an art print that was darkened with black; a color that was lightened with white.
4. Balance objects of various weights on a balance device such as a scale or fulcrum.
5. Arrange objects or swatches of color in order of lightest to darkest.
6. Select five objects in an art print and point to each of them in order of lightest to darkest.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by pointing out repetition, identifying effects of the environment, and identifying characteristics of the work or style of artists. (Critic)

OBJECTIVES

1. Explain ways in which environment and culture influence the design of buildings, e.g., effects of climate, income, and availability of materials.
2. Point out examples of repetition used in works of art (color, shape, texture, etc.).
3. Identify a characteristic of the work or style of Hicks, W. Homer, Klee, Pollock, and Remington.

LEVEL 2

STANDARD 1

The students will develop skills vital to graphic expression by creating drawings, by showing objects in realistic context, and by having a simple printmaking experience. (Participant)

OBJECTIVES

1. Produce a picture with the sky color extending from the top of the picture down to the objects on the horizon.
2. Draw vertical objects, such as trees and chimneys, perpendicular to the ground line.
3. Draw people or objects showing logical scale relationships, e.g., parent taller than child, house larger than automobile.
4. Use lines to describe the contour of objects and produce a pattern by repeating one or more shapes.
5. Create prints by stamping or relief print methods.
6. Use lines, dots, and shapes to add textural details such as brick, grass, shingles, and hair.
7. Overlap objects in a picture to suggest depth.
8. Outline "drawing strategies" such as "blocking in," gesture, or stick figure.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by telling how colors seem warm or cool, by pointing out the effects of black and white on other colors, and by exhibiting a basic understanding of the color wheel. (Observer/listener)

OBJECTIVES

1. Point out contrasts (black and white) in an art print and ways in which they reinforce and brighten colors.

2. Distinguish colors as warm or cool.

3. Label a color wheel; mix secondary and tertiary colors from red, yellow, and blue; and point out the use of these colors in an art print.

STANDARD 3	The students will develop skills for understanding works of art and the cultures that produced them by telling how elements relate parts of a composition and by identifying characteristics of the work or style of five new artists. (Critic)

OBJECTIVES

1. Point out where the artist used one or more elements to relate parts of a composition to each other in an art print, e.g., by repeating a color or texture or by overlapping.

2. Identify a characteristic of the work or style of Brueghel, Chagall, Gainsborough, Leonardo, and Millet.

LEVEL 3

STANDARD 1	The students will develop skills vital to graphic expression by creating drawings that illustrate an understanding of unity, simple perspective concepts, cast shadows, and strategies for starting a picture. (Participant)

OBJECTIVES

1. Create the illusion of depth by drawing objects smaller as they get farther away.
2. Illustrate how cast shadows fall away from the light source.
3. Identify common objects whose forms resemble the cone, cube, cylinder, sphere, or pyramid.
4. Draw distant objects as a single mass or as combinations of shapes without detail.
5. Draw a picture in which the relative sizes of different subjects and their parts are represented.
6. Produce a form and indicate how attention was paid to every visible part.
7. Use "drawing strategies" such as blocking in, gesture, or stick figure.

STANDARD 2	The students will develop perceptions vital to judging and creating aesthetic form by demonstrating an understanding of how function influences design, how artists organize space, and how colors may be used to create contrast and optical weight. (Observer/Listener)

OBJECTIVES

1. Describe two or more ways by which all of the space in an arrangement (art print) has been considered.
2. Describe how the function of an object influenced its form.

3. Use a pair of complementary colors, plus their tints and shades to create a design in which one hue is dominant. Point to an example of a dominant hue in an art print or an advertisement.

4. Describe ways by which pure colors overpower grays and bright colors dominate dark ones. Point out an example of one color dominating another in a picture.

5. Indicate parts of a picture in which objects that contrast with their backgrounds have more optical weight than those that blend with their backgrounds.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by pointing out the use of contrast in an art print and identifying characteristics of the work or style of five new artists. (Critic)

OBJECTIVES

1. Use contrast to emphasize the predominant shape or subject in a picture.

2. Describe how contrast between a subject and its background makes one of them seem closer to the viewer.

3. Identify a characteristic of the work or style of Constable, Harnett, Picasso, Rembrandt, and Suerat.

VISUAL ARTS COMPONENTS

4 - 6

PREFACE

The objectives of Levels 4-6 focus on the standards at a general awareness level with some skill development. The development of higher order thinking skills should be incorporated with each lesson taught.

LEVEL 4

STANDARD 1

The students will develop skills vital to graphic expression by creating form, by graying color, and by describing two strategies for beginning a drawing. (Participant)

OBJECTIVES

1. Demonstrate an awareness that the placement of objects in a picture may affect how far or how near they appear.
2. Demonstrate an enhanced ability to see and use detail in a drawing.
3. Add gray to a color to change its intensity.
4. Draw objects with a light side and a shadow side.
5. Use at least two "drawing strategies" such as blocking in, gesture, or stick figure.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by creating moods, feeling, unity, and movement in a picture and by minimizing space. (Observer/Listener)

OBJECTIVES

1. Repeat elements in a design to create a feeling of movement and rhythm. Point out where an artist has created movement in a work of art.

2. Demonstrate that value changes can be used to add interest to a form, e.g., changing planes, coloring, or adding texture. Point out ways in which artists have used this concept in their work.

3. Create a picture that depicts a mood or a feeling through appropriate value keys. Identify the value key of three different art prints.

4. Identify ways in which space can be minimized in a picture, e.g., using flat shapes, keeping color the same value or intensity, and allowing only the contour of an object to be seen.

5. Vary the elements of an arrangement to make the space divisions more interesting. Look at works of art and tell how the artists made space divisions more interesting.

6. Point out how the shape of shadows in a print or drawing can appear to be different from the shape of the objects casting them.

STANDARD 3	The students will develop skills for understanding works of art and the cultures that produced them by describing works of art, telling how artists get ideas for their work, and identifying one characteristic about the work or style of five artists. (Critic)

OBJECTIVES

1. Identify at least three similarities and differences in the style of works of art.

2. Tell how objects may have surprisingly different characteristics when viewed from varied perspectives.

3. Describe works of art with terms such as portrait or landscape, abstract or realistic, painting or sculpture, and drawing or print.

4. Identify at least four themes commonly found in works of art and describe ways in which artists treat themes.

5. Tell how artists get ideas for their work, e.g., nature, other people, imagination, experimentation, and events.

6. Tell how artists use symbols to express moods, feelings, and ideas.

7. Point out the works of Cezanne, Monet, Turner, Van Gogh, and Vermeer, along with those introduced in Level 1. Tell one thing about the style of each of the new artists.

LEVEL 5

STANDARD 1

The students will develop skills vital to graphic expression by creating textures, defining planes and proportion, and rendering shadows. (Participant)

OBJECTIVES

1. Use structural lines to identify planes within an object.
2. Create illusions of common textures with lines, dots, shapes, and value contrasts.
3. Measure and describe the ratio between two given objects or of a part to its whole.
4. Render objects more accurately as a result of thoughtful study and analysis of plants and animals.
5. Draw the shadow of an object detached from it when the object is soaring, floating, or flying.
6. Use at least two "drawing strategies" such as blocking in, gesture, or stick figure.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by demonstrating the use of positive/negative space, balance, and symmetry. (Observer/listener)

OBJECTIVES

1. Distinguish between positive and negative shapes in an art print.
2. Balance parts of a design, either formally or informally, and achieve the balance by adjusting weights, focusing attention, or contrasting something. Tell how balance has been used in an art print.
3. Show how symmetry can provide a sense of stability in any arrangement--two dimensional or three dimensional. Tell how symmetry has been used in a work of art.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by pointing out ways in which artists use abstraction and create stability, by describing art forms, and by identifying artists' styles. (Critic)

OBJECTIVES

1. Tell how artists may express themselves by distorting or stylizing objects.
2. Tell how distortions occur in such things as reflections, rubbery forms, and melting or deflating objects. Pick out examples of this concept in at least two pictures.
3. List three ways stylized forms can have naturalistic aspects.
4. List three ways artists used triangular shapes to strengthen a design.
5. Describe and give examples of the five major uses of art: (1) philosophy or religion, (2) utility (use), (3) documentation (history), (4) ornamentation (decoration), and (5) self-expression.
6. List five ways in which advertising design and its related fields influence one's life.
7. Describe art forms using terms such as large or small, realistic or abstract, and geometric or organic.
8. Point out the works of artists introduced in the second grade, along with those of Bingham, Dali, Degas, Durer, and Gauguin. Tell at least one thing about the style of each of the new artists.

LEVEL 6

STANDARD 1	The students will develop skills vital to graphic expression by using perspective in drawing, rendering texture and form, and creating sculpture. (Participant)

OBJECTIVES

1. Create a form by carving, cutting, or scooping parts away from a whole.
2. Use lines to make a drawing in which the surface appears warped and has depth or space.
3. Paint distant objects bluer or grayer than those in the foreground to create illusions of depth or distance.
4. Draw the base of an object higher on the drawing surface when it is farther away than another. (This is only valid when the objects being drawn are on a flat surface.)
5. Describe the relationship between the horizon line and eye level. Draw objects as they relate to the eye level--above, below, or on the eye level.
6. Draw parallel lines converging to a point at eye level to help create an illusion of depth.
7. Draw shadows that are darker underneath objects and gradually get lighter as they go away from them.
8. Render overlapping shadows as a single dark shape and point out where shadows describe the form or plane on which they fall.
9. Paint shadows as darker, grayer, and less intense versions of whatever color they rest upon.
10. Draw a picture containing at least five changes in value ranging from darkest to lightest.
11. Draw a picture using highlight, halftone, and shadow side with a shadow edge or core line. Draw forms with a cast shadow and areas of reflected light.
12. Create the illusion of some common textures by using a range of values and contrast.
13. Use a minimum of two strategies in starting a drawing.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by rendering objects in space; by creating rhythm, motion, and balance; and by describing the basic properties of color. (Observer/Listener)

OBJECTIVES

1. Point out objects in a print that are accurately rendered in space.

2. Use linear shapes to create rhythm and motion and to lead the eye in predetermined directions. Describe how this concept is used in a work of art.

3. Create balance in an arrangement by using more detail in some areas than in others. Point to an example of this concept in a work of art.

4. Describe the three properties of color (hue, value, and intensity) and given two colors, name the hue and identify which is darker in value and which is more intense. Tell how this concept has been applied by artists.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by identifying one characteristic found in the work or style of five new artists. (Critic)

OBJECTIVES

1. Point out the works of artists introduced at Level 3 along with those of David, Goya, Monet, Michelangelo, and Wyeth. Tell at least one thing about the style of each of the new artists.

VISUAL ARTS COMPONENT

7 - 8

COURSE TITLE	UNITS OF CREDIT	PREREQUISITE
Foundations I	.5	Mastery of K-6 Core Objectives

COURSE DESCRIPTION

This course is an extension of the elementary core with emphases on drawing, color, and design objectives. (Some emphasis may be given to skill development in drawing.) It is a PREREQUISITE to all other art classes and can only be skipped by the student who is able to demonstrate the required competencies. The objectives are presented randomly, not in any instructional sequence. If a student takes the Foundations I Course at Level 7 or 8 and successfully masters the required competencies, the student is eligible for a course from "A" Cluster, "B" Cluster, Foundations II or Art History, and Criticism. Mastery of the Core is required, but teachers may add to the list of objectives, since they do not constitute a complete course,

BASIC VOCABULARY, AESTHETICS, HIGHER LEVEL THINKING SKILLS, DIVERGENT PRODUCTION AND ART CRITICISM SHOULD BE BUILT INTO LESSON PLANS FOR EACH OBJECTIVE.

STANDARD 1

The students will develop skills vital to graphic expression by rendering structure, value, scale, texture, depth, and color in a picture. (Participant)

OBJECTIVES

1. Render variations of darkness and lightness in a drawing.
2. Render the scale (or size relationship) of objects.
3. Use structural lines to define the planes or surfaces of objects.
4. Use lines, dots, and shapes to create the illusion of texture.
5. Draw overlapping objects to create an illusion of depth.
6. Use aerial perspective to create the illusion of depth:
    a. Draw objects smaller as they get farther away.
    b. Use contrast to create depth and lack of contrast to minimize depth.

   c. Note that when the base of an object is higher in the picture, the object appears farther away (on a flat surface).

7. Alter a color's value by mixing it with a lighter or darker color or with white or black.

8. Render an object in the path of light with a light side, a shadow side, and a cast shadow.

9. Use linear perspective to create the illusion of depth.

10. Demonstrate an ability to use at least two or more strategies (or ideas) that might begin a drawing, e.g., blocking in, gesture, measuring ratio, defining attitude and position.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by describing the use of repetition and emphasis in works of art, by telling how elements are used to create unity, and by relating colors in a composition.
(Observer/Listener)

OBJECTIVES

1. Repeat shapes or objects in a drawing and tell how repetition was used in a work of art.

2. Extend parts of an object beyond the boundaries of the picture plane to make a composition more interesting.

3. Use any of the elements to relate parts of a composition to each other, e.g., by repeating a color or texture and by overlapping. Show where artists have used this idea in their art.

4. Organize colors on a color wheel to show their relationships.

   a. Mix red, yellow, and blue to get most other colors.

   b. Mix primary colors to get secondary colors.

   c. Add white to a color to produce a "tint," add black to produce a shade, and gray to produce a tone.

5. Use contrast to create a point of emphasis (focal point) in a composition. Show how artists have created focal points in their art.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by recognizing the works of specific artists and the periods they represent and by describing ways in which basic forms have been used by artists. (Critic)

OBJECTIVES

1. Recognize that all forms are variations of the cone, cube, cylinder, sphere, and pyramid and incorporate the forms in a drawing.

2. Develop an understanding of the history of art through the following:

   a. Preview the 30 artists covered in Levels 1-6.

   b. Point out the works of Caravaggio, Ingres, Renoir, Toulouse-Lautrec, El Greco, Matisse, and Hopper.

   c. Tell at least one characteristic of the following periods and correlate them with the artists studied (so far as they apply). Periods include Greek, Renaissance, Baroque, Neo-classic, Impressionist, Post-impressionist, Expressionist, and American.

8 - 10

COURSE TITLE	UNITS OF CREDIT	PREREQUISITES
Foundations II (Core Option)	.5	Foundations I

COURSE DESCRIPTION

This is a continuation of Foundations I and a prerequisite to all of the "C" Cluster courses. Any student who has successfully mastered the required competencies for Foundations I is eligible for this course. Teachers may add to the list of concepts and skills but they cannot delete any that are required. Students who demonstrate the required competencies may skip the course and receive credit.

BASIC VOCABULARY, AESTHETICS, HIGHER LEVEL THINKING SKILLS, DIVERGENT PRODUCTION AND ART CRITICISM SHOULD BE BUILT INTO LESSON PLANS FOR EACH OBJECTIVE.

STANDARD 1	The students will develop skills vital to graphic expression by rendering perspective, form, texture, and foreshortening. (Participant)

OBJECTIVES

1. Use lines to make a drawing in which the surface appears warped and has the illusion of depth or space.
2. Use aerial perspective to create an illusion of depth:
   a. Draw distant objects flatter and less detailed than objects in the foreground.
   b. Render the color of distant objects grayer and sometimes bluer than foreground objects.
3. Use linear perspective to create an illusion of depth.
4. Create the illusion of form with a light source and areas of highlight, half-tone, shadow edge, reflected light, and cast shadow.
5. Render the illusion of texture with dots, lines, shapes, and changes in value.
6. Render objects that appear foreshortened.

7. Demonstrate two or more strategies or ideas that might be used in "learning to see." (See examples a-e.)

   a. Students may refine their perceptual skills by using the following examples techniques or procedures:

      Turning a drawing upside down to see it in a new way.
      Drawing with the opposite hand.
      Drawing the subject upside down.
      Analyzing similarities and differences among objects.
      Drawing subjects without looking at the paper.
      Drawing small objects many times their natural size and in great detail.
      Holding the drawing up to the mirror.
      Drawing according to the directions of another person.

   b. Blocking in all of the main parts before adding details.

   c. Creating mental grids and visual alignments to increase the accuracy of scale, proportion, and placement in a drawing.

   d. Drawing quick gesture studies to define the attitude and position of a subject.

   e. Using value to define volume and mass.

STANDARD 2	The students will develop perceptions vital to judging and creating aesthetic form by discussing ways in which artists create visual effects with color, create eye movement and unity in a picture, and organize positive and negative space to achieve balance. (Observer/Listener)

OBJECTIVES

1. Mix colors with varying effects:

   a. Arrange complements to gray or intensify each other. Point out ways in which an artist did this in his/her work.

   b. Alter the intensity of a color by mixing it with its complement or with gray.

2. Create eye movement in a predetermined direction by repeating elements, by gradual changes in hue or value, by progression of the sizes of adjacent shapes, and by arranging linear shapes. Tell how eye movement was created in an art print.

3. Create unity in a composition without monotony or confusion by varying the elements, by using contrast, and by grouping. Tell how artists create unity in their art.

4. Alter negative and positive space to produce a more interesting composition. Describe how an artist has altered positive and negative space.

5. Organize space both formally and informally, or adjust the placement and optical weight of objects to achieve balance. Point out the use of formal and informal balance in works of art.

STANDARD 3	The students will develop skills for understanding works of art and the cultures that produced them by describing how artists create moods or feelings with color and value and by recognizing the works of specific arts and the periods they represent. (Critic)

OBJECTIVES

1. Create moods or feelings with color by:

   a. Using pure color in areas of emphasis.

   b. Altering the "coolness" or "warmness" of colors.

   c. Making objects advance or recede through color.

   Tell how artists have created moods of feeling with color.

2. Describe the effect that various properties of color have on a composition:

   a. Alter the value of intensity of a color.

   b. Render the shadow of a color darker and grayer than the color it falls on.

   c. Observe that opaque and translucent materials reflect color differently.

   Identify works of art in which this concept has been used.

3. Indicate parts of a picture in which objects that contrast with their background have more optical weight than those which blend with their background.

4. Review the study of artists covered in Foundations I.

5. Point out the works of Grunewald, Frank Lloyd Wright, Fragonard, Gericault, Daumier, Henry Moore, Gorky, Johns, Stella, Shahn, Vassarely, and Magritte.

6. Tell at least one characteristic of the following periods and correlate them with the artist and periods studies previously. Periods include: Egyptian, Rococo, Romantic, Realism, Abstract-Expressionism, Surrealism, Op, and Pop.

8 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Ceramics I (Core Option)	.5	Foundations I

COURSE DESCRIPTION

Basic procedures and processes unique to ceramics will be introduced, and skills in forming clay will be one of the outcomes of the course. Developing the ability to make judgments about the aesthetic quality of ceramic forms and mastery of the core concepts will be required. Higher level thinking skills, divergent production, and art criticism should be built into every lesson taught.

STANDARD 1

The students will develop skills vital to graphic expression by demonstrating proper procedures for forming, drying, decorating, and preparing clay. (Participant)

OBJECTIVES

1. Knead ceramic clay so that it has an even consistency with a correct moisture content.
2. Join clay parts by such methods as adding water, using slip, or scoring surfaces.
3. Form ceramic clay by:
    a. Coil method.
    b. Slab method.
    c. Pinch method.
    d. Subtractive method.
4. Dry clay objects slowly and evenly.
5. Decorate a clay surface by:
    a. Applying a glaze.
    b. Creating textural effects.
6. Recycle unfired clay.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by describing ways in which artists use elements and principals of composition aesthetically, and by creating pleasing relationships between function and form and positive and negative space. (Observer/Listener)

OBJECTIVES

1. Create a point of emphasis on a three-dimensional object.
2. Create a feeling of unity without causing monotony and create variety without causing visual confusion.
3. Use both positive and negative space in decorating or creating a three-dimensional form.
4. Create a pleasing relationship between the size and shape of objects as well as between the parts of an object and its whole (scale and proportion).
5. Illustrate that an object is able to perform the use for which it is intended, e.g., by making the handle strong enough to support the object.
6. Alter or adjust the value and intensity of the color of objects to create harmony between them.
7. Create forms in which all views have unity and continuity.
8. Use a variety of color compositions where they are appropriate, e.g., monochromatic, analogous, complimentary, and triad.
9. Use principles of aesthetic proportions, e.g., the golden mean or golden section.
10. Use one or more elements to relate parts of a composition to each other, e.g., by repeating a color or texture and overlapping forms.
11. Point out ways in which potter artists have achieved each of the preceding ten objectives in their work.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by describing how artists use repetition and balance in ceramics, by using a ceramic vocabulary, and by identifying famous artists and professions related to ceramics. (Critic)

OBJECTIVES

1. Use the principle of repetition when decorating a surface. Describe how a potter artist has used repetition.

2. Create both formal and informal balance in a design or adjust the placement and optical weight of objects to achieve balance. Tell how artists have created balance in their three-dimensional forms.

3. Describe ways in which decoration can enhance a form and not detract from it, e.g., by painting, staining, and adding texture.

4. Define basic ceramic terms:

   stoneware
   porcelain
   glossy glaze
   bisque
   scoring
   bone-dry
   kiln
   wedging
   potter's wheel
   dry foot
   earthenware
   matte glaze
   semi-matte glaze
   greenware
   leather-hard
   slip
   bat
   firing
   ceramic clay
   stilt

5. Identify the parts of a pot, i.e., base, foot, neck, lip, mouth, shoulder, body (belly).

6. List the steps involved in forming a clay object: (1) knead clay, (2) form clay, (3) dry clay, (4) bisque fire, (5) glaze or decorate, (6) glaze fire.

7. Identify examples of pottery from the following cultures: Mediterranean, Oriental, European, and American Indian.

8. Identify at least three professions related to ceramics.

8 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Jewelry I (Core Option)	.5	Foundations I

COURSE DESCRIPTION

This course is intended to acquaint the student with jewelry design and criticism along with basic skills fundamental to soldering, cutting, piercing, filing, finishing, and decorating a variety of materials. Competencies for each of the core concepts will be assessed. Higher level thinking skills and art criticism should be built into every lesson taught.

STANDARD 1	The students will develop skills vital to graphic expression by creating a design for an article of jewelry, by selecting a method of construction, and by completing the steps required in fashioning jewelry. (Participant)

OBJECTIVES

1. Create original designs.

2. Determine the suitability of the materials selected for the design.

3. Determine the appropriateness of the form for the function of the design, e.g., sharp points are not appropriate for a ring, or earring must not be too heavy.

4. Comolete the rough finishing of a design.

5. Finish the design by polishing and buffing it with appropriate compounds.

6. Select one of the following areas of emphasis and create an article of jewelry:

   a. Lost wax casting

      (1) Create a model in wax.
      (2) Attach appropriate sprues and funnel.
      (3) Make a mold with an appropriate investment material.

(4) Clean the metal piece, e.g., by sand blasting or acid bath.
(5) Remove the sprue and rough finish by cutting and filing.
(6) Recycle unused metal.

NOTE: The teacher should melt out the wax and cast the mold when molten metals are used.

b. Sand casting, cuttle bone, or similar forms

(1) Create a negative impression from the mold material (tufa, sandstone, or cuttle bone).
(2) Flux the mold with carbon.
(3) Complete rough finishing, including sprue and funnel removal by cutting, filing, and so forth.
(4) Clean the metal piece, e.g., by sand blasting or acid bath.
(5) Recycle unused metal.

c. Wood jewelry

(1) Laminate materials.
(2) Cut, saw, file, or form desired shapes.
(3) Attach appropriate chains, findings, or clasps.

d. Soldered jewelry

(1) Solder metals.
(2) File, cut, weave, and blend metals.
(3) Chase, matt, and stamp metals.

NOTE: For students who are mature enough to solder metals, jewelry may be fashioned from flat metals or wire of different gauges.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by telling how jewelry designers have used principles of art to enhance the aesthetic quality of their design and by describing the use of positive and negative space relationships in jewelry. (Observer/Listener)

OBJECTIVE

1. Use visual examples and tell how jewelry designers:

a. Create a point of emphasis on a three-dimensional object.

b. Create a feeling of unity without causing monotony and create variety without causing visual confusion.

c. Use both positive and negative space in decorating or creating a three-dimensional form.

d. Create a pleasing relationship between the size and shape of objects as well as between the parts of an object and its whole (scale and proportion).

e. Alter or adjust the value and intensity of the color of objects to create harmony between them.

f. Create forms in which all views have unity and continuity.

g. Use a variety of color compositions where they are appropriate, e.g., monochromatic, analogous, complimentary, and triad.

h. Use principles of aesthetic proportions, e.g., the golden mean or golden section.

i. Use one or more elements to relate parts of a composition to each other, e.g., by repeating a color or texture and overlapping forms.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by discussing the use of repetition, balance, and decoration in jewelry design; by defining basic jewelry terms; and by identifying cultures famous for their fine jewelry. (Critic)

OBJECTIVE

1. Use the principle of repetition when decorating a surface.

2. Tell how jewelry designers create both formal and informal balance in a design or adjust the placement and optical weight of objects to achieve balance.

3. Demonstrate that decoration can enhance a form and not detract from it, e.g., by painting, staining, and adding texture.

4. Identify and explain the use of the three preceding objectives in jewelry designed by artists.

5. Define basic jewelry terms:

    polish
    buff
    flux
    mold
    cast
    lost wax casting
    centrifugal casting
    sprue
    funnel
    cuttle bone
    chase
    solder

6. Identify at least three professions related to jewelry design.

7. Identify at least one culture famous for its jewelry design.

8 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
General Crafts (Core Option)	.5	Foundations I

COURSE DESCRIPTION

General crafts is an introductory course designed to expose the student to basic processes or techniques relating to wood design, leather design, floral and glass design, paper craft, metal design, mosaics, puppets and marionettes. Higher level thinking skills, divergent production, and art criticism should be built into every lesson.

STANDARD 1

The students will develop skills vital to graphic expression by creating craft forms, with both additive and subtractive methods, and by following the steps required in each. (Participant)

OBJECTIVES

1. Create a craft form from wood (subractive method):
    a. Safely use tools such as drills, saws, mallets, chisels, knives, rasps, and sandpaper in carving, cutting, sawing, or assembling.
    b. Recognize the limits of wood as a material, and how it affects its design potential.
    c. Secure the work in a safe manner to carve, glue, or sand.
    d. Use the carving process.
    e. Finish the wood by sanding, staining, and varnishing.
2. Create a craft form from one of the following:
    a. Fiber design: two of these processes should be used.

        stitching
        weaving
        knotting
        dyeing
        applique
        stuffing and forming
        hooking

b. Paper craft:

(1) Use processes of cutting, folding, supporting, tearing, scoring, gluing, decorating (where appropriate), pasting, bending, or forming.

(2) Use tools such as scissors and x-acto knives.

c. Glass design:

(1) Use processes of cutting, etching, and joining.

(2) Use tools such as glass cutter, grinder, files, and soldering iron.

NOTE: Students may have optional craft experiences in areas such as leather design, floral arranging, mosaics, metal design, puppets, and marionettes and will need to understand the processes related to both forming and decorating those specific crafts.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by describing ways in which artists have used emphasis, unity, and proportion in their craft designs, and by describing the role of space, function, and decoration in design. (Observer/Listener)

OBJECTIVES

1. Identify ways in which craftsmen created a point of emphasis on a three-dimensional object.

2. Point out ways in which craftsmen created a feeling of unity without causing monotony and created variety without causing visual confusion.

3. Show how artists use both positive and negative space in decorating or creating a three-dimensional form.

4. Tell how artists created a pleasing relationship between the size and shape of objects as well as between the parts of an object and its whole (scale and proportion).

5. Point out examples of where craftsmen can:

   a. Illustrate that an object is able to perform the use for which it was intended, e.g., by making the handle strong enough to support the object.

    b. Alter or adjust the value and intensity of the color of objects to create harmony between them.

    c. Create forms in which all views have unity and continuity. Tell how artists create unity in their designs.

    d. Use a variety of color compositions where they are appropriate, e.g., monochromatic, analogous, complimentary, and triad.

6. Identify ways in which craftsmen utilize principles of aesthetic proportions, e.g., the golden mean or golden section.

7. Describe how craftsmen use one or more elements to relate parts of a composition to each other, e.g., by repeating a color or texture and overlapping forms.

STANDARD 3	The students will develop skills for understanding works of art and the cultures that produced them by discussing ways in which crafts use principles of design, by defining basic craft terms, and by identifying cultures famous for their crafts. (Critic)

OBJECTIVES

1. Point out ways in which artists use the principle of repetition when decorating a surface.

2. Create both formal and informal balance in a design or adjust the placement and optical weight of objects to achieve balance. Tell how artists have accomplished the same task.

3. Demonstrate that decoration can enhance a form and not detract from it, e.g., by painting, staining, and adding texture.

4. Define basic craft terms:

    carve
    additive
    subtractive
    sand casting
    knotting
    macrame
    applique
    weaving
    stitchery
    dyeing
    scoring
    hooking
    batik
    etching (glass)
    solder

5. Identify an example of crafts from the following cultures: African, Oriental, European, and American.

6. Identify at least three professions associated with craft design.

8 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Sculpture I (Core Option)	.5	Foundations I

COURSE DESCRIPTION

A beginning course that introduces basic procedures in additive and subtractive methods for making sculpture. Student competencies in designing and creating sculptural forms will be assessed. Higher level thinking skills, divergent production, and art criticism should be built into every lesson taught.

STANDARD 1

The students will develop skills vital to graphic expression by creating sculptural forms, both additive and subtractive, and by following the appropriate steps in creating sculpture. (Participant)

OBJECTIVES

1. Create sculpture by the additive method, preferably using ceramic clay.
    a. Create an original design or select an appropriate model.
    b. Construct an appropriate armature and/or base.
    c. Create the sculptural form.
    d. Use steel or wood sculpture tools.
    e. Remove the sculpture from the armature.
    f. Hollow out and reassemble the sculpture by scoring, adding slip, or reworking the seam.
    g. Enhance the surface by texturing, burnishing, etc.
    h. Dry the object slowly and evenly.
    i. After firing, select and apply an appropriate patina, stain, or paint to further enrich the surface of the sculpture.
2. Create sculpture by the subtractive method, preferably using plaster with vermiculite or soapstone.
    a. Create an original design or select an appropriate model.

b. Cast a mixture of plaster and vermiculite. (An empty 1/2 gallon milk carton makes a good mold.)

c. Carve, scoop, cut, file, or chisel out the sculptured form.

d. Finish the surface by sanding, texturing, etc.

f. Prepare the form for display by adding or including a base.

NOTE: Other sculptural choices might include welded or soldered "junk" sculpture and wood constructions; however, these could not be used as replacement for Objectives 1 and 2.

Additional materials for sculpture include stone (alabaster or sandstone), metal (cast or welded), paper mache, wood, fabric, styrofoam, and polyurethane foams. One of these choices could be used as a replacement for Objective 1 or 2.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by telling how sculptors have used basic elements and color harmony in their designs, and by explaining the importance of special relationships in sculpture. (Observer/Listener)

OBJECTIVE

1. Create a point of emphasis on a three-dimensional object. Tell how sculptors have used emphasis in their work.
2. Create a feeling of unity without causing monotony and create variety without causing visual confusion. Point out examples of this concept in pictures of famous sculpture.
3. Describe how a sculptor has used both positive and negative space in decorating or creating a three-dimensional form.
4. Tell how a sculptor created a pleasing relationship between the size and shape of objects as well as between the parts of an object and its whole (scale and proportion).
5. Give an example of how a sculptor altered or adjusted the value and intensity of the color of objects to create harmony between them.
6. Create forms in which all views have unity and continuity. Tell how sculptors have accomplished this objective in their own work.

7. Use principles of aesthetic proportions, e.g., the golden mean or golden section. Indicate ways in which sculptors have used aesthetic proportions on their own work.

8. Use one or more elements to relate parts of a composition to each other, e.g., by repeating a color or texture and overlapping forms. Point out ways in which a sculptor has related parts of a composition appropriately.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by defining basic sculpture terms; by naming three famous sculptors and identifying their work; and by describing the role of repetition, surface enrichment, and balance in good sculpture design. (Critic)

OBJECTIVES

1. Discuss ways in which noted sculptors have used the principle of repetition when enhancing a surface.

2. Point out the use of both formal and informal balance in a design or adjust the placement and optical weight of objects to achieve balance.

3. Point out pieces of sculpture that demonstrate that surface enrichment can enhance a form and not detract from it, e.g., by painting, staining, and adding a texture.

4. Define terms such as:

   stain
   armature
   oil base clay
   water base clay
   bisque
   bone dry
   leather hard
   scoring
   glaze
   patina
   marquette
   vermiculite

5. Identify an example of sculpture from the following cultures: Mediterranean, Oriental, European, American, and African.

6. Identify at least three professions related to sculpture.

7. Name at least three famous sculptors from the past and one contemporary sculptor, for example:

Michelangelo
Rodin
Moore
Polyclitus
Bernini
Baskin
Oldenburg
Lucchesi
Segal
Calder
Maillol
Brancusi
Lipchitz
Gabo
Giacommetti

8 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Art History and Criticism I (Core Option)	.5	Foundations I

COURSE DESCRIPTION

In this course, a non-technical look at the arts, the principal periods of art history and the artists most closely associated with each are emphasized. The course will explore the styles and techniques of artists, the role of symbols in art, the use of elements and principles of design, and other such means for students to develop skills for looking at and talking about works of art in an educated manner. Competencies for each concept basic to this course will be assessed. Basic vocabulary, pronunciation keys, higher level thinking skills, and divergent production techniques should be built into every lesson taught.

STANDARD 1

The students will develop skills vital to graphic expression by discussing the role they may play in viewing art forms, distinguishing between the various art forms, and explaining ways in which people value art. (Participant)

OBJECTIVES

1. Describe differences in the role of observer, participant, and critic as each relates to the visual arts.

2. Discuss the relationship between natural objects, folk art (objects made by people untrained in art), popular art (magazines, billboards, movies), practical art (architecture, and interior design, etc.), and expressive art.

3. Discuss how the following experiences affect how a person values art:

    a. The setting in which art is viewed.

    b. How a person has learned to "see."

    c. How much is known about the elements and principles of design.

    d. What is known about symbolism in art.

   e. What the art work reminds one of.

   f. How much is known about the history of the work.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by identifying ways elements of design have been used by artists and by describing techniques artists use to create moods or feelings in their work. (Observer/Listener)

OBJECTIVES

1. Look at works of art and identify how the artist:
   a. Used emphasis in the work.
   b. Created movement through repetition in the work.
   c. Created movement through overlapping in the work.
   d. Created balance in the work.
   e. Used elements to give unity to the work.
   f. Created a mood or feeling with color in the work.
   g. Used all of the space effectively.
   h. Altered a shape or form while maintaining aesthetic proportions.
   i. Created a balance between simplicity and detail.
   j. Created a feeling of "flatness" by eliminating depth.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by using nontechnical methods to describe works of art to tell how they were created; by identifying themes, styles, symbols, and techniques used by artists; and by identifying common art terms and major periods of art history. (Critic)

OBJECTIVES

1. Explain ways in which the environment influenced the design of buildings in major cultures around the world.

2. Distinguish between paintings, drawings, and photographs of similar subjects.

3. Explain how an artist's work is a form of nonverbal communication.

4. Describe differences among works of art by identifying subject matter, color usage, feelings or mood, and what is seen in the work, i.e., what is happening.

5. Identify sculpture by the terms "relief" and "in-the-round."

6. Identify similarities and differences in the style of various well-known artists.

7. Point out examples of experimentation, imagination, and creativity in works of art.

8. Point out examples of artists creating a mood or feeling by "keying" the color or value of objects in an art product.

9. Point out the use of themes in works of art and similarities and differences in the way the themes are treated.

10. Show examples of symbolism used in art and describe logical interpretations of their usage.

11. Describe examples of stylized and representational works of art.

12. Point out how the function and materials that a form is made of influence its structure, shape, or appearance.

13. Point out examples of the five major uses of art: (a) philosophy or religion, (b) utility, (c) documentation (historical use), (d) ornamentation or decoration, and (e) self-expression.

14. Describe art forms in terms of realistic or abstract, geometric or organic, figural, natural, still life, or cityscape.

15. Identify special techniques used by artists in painting, sculpture, and printmaking.

16. Participate in the process of looking at and talking about works of art and the cultures that produced them. This would include discussing the artist and his culture, the tools the artist used, the mood feeling or message of the work, the effects of elements and principles of design evident in the work, and the styles or techniques used.

17. Name at least six major art periods and one major artist representing each period.

18. Define the following words in addition to understanding the vocabulary related to the learner objectives:

    aesthetic
    style
    facade
    in-the-round
    naturalistic
    closed form
    technique
    arch
    period
    relief
    linear
    open form
    volume
    contemporary
    architecture
    abstract
    embossed
    matte
    patina
    mass
    column
    stylized
    opaque
    vault
    plan
    media

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COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Photography I (Core Option)	.5	Foundations I

COURSE DESCRIPTION

Instruction focuses on photography as another art form and basic procedures for operating a camera, developing film, and making prints and enlargements. Competencies for all the basic concepts, skills, and procedures relevant to the course will be assessed. Higher level thinking skills and art criticism should be built into every lesson taught.

STANDARD 1

The students will develop skills vital to graphic expression by developing basic camera mastery and essential skills and theory for darkroom work. (Participant)

OBJECTIVES

1. Explain the functions of the various parts of a camera: body, viewer, lens, shutter, aperture setting.

2. Explain how to use lens, aperture, adjustment, and shutter speed for the following situations:

   a. To photograph subjects in various stages of action.

   b. To control the depth of field.

   c. To compensate for restricted light conditions, i.e., when fast action must be photographed under low-light conditions or when a shallow depth of field is required under extreme light conditions.

3. Explain the effect light has upon photographic film and paper.

4. Describe the sequence of chemicals through which photographic film and paper must be taken in the development process.

5. Describe ways to control areas where the light strikes photographic paper, e.g., by dodging, burning, and by the use of negatives, masks, and opaque objects.

6. Describe ways to control the chemical reaction of photograph paper through such processes as chemical dodging.

7. Select appropriate developer and develop black and white film.
8. Make contact prints of the negatives on photographic paper.
9. Use the enlarger's film carrier, aperature setting, time, lens, and height and adjustment to produce an enlargement of a negative.
10. Select appropriate paper according to the characteristics of the negative and the light source.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by composing well-designed photographs. (Observer/Listener)

OBJECTIVES

1. Show where contrast was used to create a point of emphasis (or focal point) in a photograph.
2. Alter negative as well as positive space to produce a more interesting composition. Point out how a photographer accomplishes the use of interesting negative space.
3. Point out how photographers have created harmony or unity in a composition with sufficient variety to avoid monotony or confusion.
4. Show how photographers have created both formal and informal balance in a design or adjusted the placement and optical weight of objects to achieve balance.
5. Show how a photographer has grouped the elements of a design to make it more interesting.
6. Use related, contrasting, or neutral color schemes to alter the mood or feeling of a design. Point out how a photographer may have accomplished this objective.
7. Point out how a photographer has created a pleasing relationship between the size and shapes of objects, as well as between the parts of an object to its whole. (scale and proportion).

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by discussing photography from the view of an art critic, by identifying related careers, and by identifying well-known photographers. (Critic)

OBJECTIVES

1. Point out ways in which photographers used various elements to relate parts of a composition to each other, e.g., by overlapping parts or repeating a color or texture.

2. Use repetition to lead the eye in a predetermined direction, creating illusions of rhythm and movement. Tell how a photographer used repetition.

3. Point out ways in which a photographer created patterns to attract attention or provide areas of interest.

4. Overlap objects to create an illusion of depth. Tell how photographers use overlapping.

5. Show how the contrast of an object or shape with its background influences the way it seems to advance or recede.

6. Define the following photographic terms:

    aperture
    lens
    chemical dodging
    masking
    depth of field
    developer
    fixer
    hypo clear
    shutter speed
    cropping
    light dodging
    burning
    f/stop
    hypo
    wetting agent
    silver salts

7. Identify three careers that require photography skills.

8. Name two well-known photographers.

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Architecture Design I (Core Option)	.5	Foundations I

COURSE DESCRIPTION

Architecture Design I is a course on the "built" environment--how buildings are designed and the influence of architecture on our culture and life-style. Higher level thinking skills and art criticism should be built into every lesson taught. Core skills and competencies will be assessed.

STANDARD 1

The students will develop skills vital to graphic expression by demonstrating the proper use and care of architectural tools. (Participant)

OBJECTIVES

1. Use basic drafting tools and techniques.
2. Properly care for drawing tools.
3. Describe the need for drawing precision and neatness in architecture.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by describing ways in which architects use elements and principles of design in buildings. (Observer/Listener)

OBJECTIVES

1. Show how architects have related the various parts of a building to each other and to the whole design.
2. Show how architects emphasize one aspect of a building by making it contrast in some way with the rest of the design.
3. Tell how the human body might be used as a proportional model for architectural design.

4. Tell how the golden mean might be used in arranging parts of a building aesthetically.

5. Describe a variety of ways architects group the elements of a building to add more variety to the design.

6. Describe how color may be used to decorate a building, lead the eye of the viewer, and create a mood or feeling.

7. Show examples of how architects relate elements of design to give a feeling of order to a building.

8. Show examples of buildings in which architects have altered the "normal" relationships between negative and positive space to provide a dramatic effect.

9. Exhibit an awareness of color, texture, value, and spatial relationships as they apply to building designs.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by discussing historical periods, styles, and the effects of environment and design principles on buildings and by identifying architects and cultures noted for their beautiful buildings. (Critic)

OBJECTIVES

1. Identify ways in which both formal and informal balance are used by architects as they design buildings.

2. Point out how the repetition of color, line, shape, texture, and values have created the feeling of pattern or movement in various architectural designs.

3. Explain ways in which the environment influenced prominent buildings in the community, nearby cities, or in other cultures.

4. Describe how the design of buildings are influenced by the function they have to serve.

5. Point out how parts of buildings are based on forms such as the cone, cube, cylinder, sphere, and pyramid.

6. Identify three architectural styles important to art history and one of the styles found in the community.

7. List three examples of symbolism used in architectural design.

8. Describe how architects sometimes design buildings in unique ways, e.g., to conserve energy, serve the handicapped, and to conform to an unusual site.

9. Point out how specialized shapes contribute to the function and atmosphere of a building, e.g., triangles employed to provide strength and stability; tall, narrow interiors used to inspire awe and reverence; and round walls used to reduce tension.

10. Point out how the styles of a building might be identified by its roof.

11. Identify the role of columns, beams, arches, domes, and the use of concrete and steel in the structure of a building.

12. Identify the following parts of a blueprint:

    elevations
    floor plan
    footings
    plumbing
    lighting
    cabinets
    windows and doors
    closets
    structural framing

13. Name the three basic kinds of modern architectural design, along with one prominent architect, and the kind of building they designed. For example:

Type	Architect	Buildings
Mechanical	Mies Van Der Rohe	Lever Brothers Building Illinois Institute of Technology
	Walter Gropius	Bauhaus
	Philip Johnson	A.T. & T. Building, New York City
Sculptural	Le Corbusier	Notre Dame Du Haute, Ronchamp Villa Savoye at Poissy
	Ero Saarinen	Dulles Airport Gateway Arch, St. Louis
	Paul Rudolph	Yale Universtiy Art and Architecture Bldg.

Type	Architect	Buildings
Organic	Frank Lloyd Wright	Robi House, and Falling Waters Taliesen West Guggenheim Museum
	Antonio Gaudi	Casa Mila in Barcelona Churches in Spain
	Green Brothers, Pasadena, California	Private homes

14. Identify three professions related to architecture.

15. Identify two cultures noted for the design of their public buildings.

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COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Interior Design (Core Option)	.5	Foundations I

COURSE DESCRIPTION

Interior Design contains concepts and techniques basic to selecting and arranging objects, colors, and fabrics in a room in an aesthetic manner. Higher level thinking skills and art criticism should be built into the teaching process and student achievement should be assessed.

STANDARD 1

The students will develop skills vital to graphic expression by drawing rooms and furniture to scale, creating color schemes and texture boards, and demonstrating proper care of art materials and equipment. (Participant)

OBJECTIVES

1. Draw a floor plan that has a practical location for rooms, lighting, closets, doors, windows, and appliances.
2. Draw basic furniture to scale and arrange it in a practical, aesthetic manner, e,g., having logical paths for movement from one room to another, designing conversation areas in appropriate places, and creating a feeling of unity.
3. Create a color scheme (room by room) for a home. Include colors for walls, floors, ceiling, and draperies.
4. Construct a texture board that includes textures one might use in a living room for walls, floor, ceiling, and drapes.
5. Maintain painting and drawing equipment.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by telling how elements and principles of design are used to enhance the beauty of a room and by describing the influence of scale, lighting, and pattern on the appearance of a room. (Observer/Listener)

OBJECTIVES

1. Describe ways in which pattern provides surface enrichment or unifies a room.
2. Identify ways in which objects in a room relate to each other and increase the feeling of unity.
3. Show how contrast can be used to create emphasis in a room.
4. Tell how decorators use the space in a room for specific purposes.
5. Show how objects in a room must be scaled to the human figure.
6. Tell how texture may add variety and interest to a room.
7. Describe how harmony or unity is an essential ingredient in any well-designed room, e.g., harmony of color, fabrics, window decoration, and floor covering.
8. Identify when formal and informal balance are appropriate for a room and tell how each may be achieved.
9. Tell how changes in the properties of color (hue, value, and intensity) may affect the mood or feelings of a room.
10. Describe two effects that warm, cool, and neutralized colors may have on a room.
11. Tell how lighting affects visual comfort and mood in a room.
12. Describe ways in which vertical, horizontal, diagonal, and curved lines affect the feeling and mood of a room.
13. Tell how related, contrasting, and neutral color schemes affect the mood or feeling of a room.
14. Use the principle of grouping to arrange furniture in a room.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by describing the essential requirements of a good floor plan and well-designed furniture, discussing the role of interior and furniture designers, and understanding related vocabulary. (Critic)

OBJECTIVES

1. Describe the essential requirements of a good floor plan. Discuss both good and bad features of plans found in magazines.

2. Tell how rhythm was achieved by repetition, gradation, transition, opposition, and radiation in an interior or picture of an interior. Examples should include both classical and contemporary designs.

3. Point out how well-designed furniture meets three criteria:

   a. It serves a purpose.

   b. It is attractive.

   c. Structurally it reflects its purpose.

4. Identify four ways an interior designer may assist a client.

5. Compare three different kinds of interiors, e.g., (a) Seventeenth Century France, Colonial-American, and Modern American; or (b) Japanese, Indian (Asia), and Eighteenth Century English. Discuss the differences and similarities noted in the use of design principles and in the styles of the three periods.

6. Identify at least three designers of furniture and describe the style of each. These might include:

   Ludwig Mies Van Der Rohe
   Hans Knoll
   Alvar Aalto
   Gebruden Thonet
   Thomas Chippendale
   Frank Lloyd Wright
   Charles Eames
   Eero Saarinen
   Hans Wegner
   Harry Bertoia
   Daniel Marot
   Marcel Breuer
   Robert Adam
   Andrea Palladio
   William Morris
   George Hepplewhite
   Thomas Sheraton
   Duncan Phyfe
   Gerrit Rietveld
   Kaare Klint

7. Define the following terms:

   background color
   decorative design
   structural design
   decorating
   wall covering
   frame, sash, sill
   interior designer
   related colors
   neutral colors
   contrasting colors
   surface enrichment
   curtains

8. List 10 examples of badly designed furniture and write a supportive statement for each.

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Painting I (Core Option)	.5	Foundations II

COURSE DESCRIPTION

Painting I is an extension of the Foundations I and II courses and contains instruction on basic techniques and skills relating to the use of watercolor and/or acrylics or oil paints. Painting may also include mixed media, e.g., collage, and various combinations of painting materials. Higher level thinking skills and art criticism should be built into every lesson taught. Competencies for each concept basic to this course will be assessed.

STANDARD 1

The students will develop skills vital to graphic expression by demonstrating an understanding of basic color and drawing concepts and by properly maintaining painting equipment. (Participant)

OBJECTIVES

1. Use structural lines to define the planes or surfaces of objects.
2. Render the scale (or size relationship) of objects.
3. Create the illusion of form with a light source and areas of highlight, halftone, shadow edge, reflected light, and cast shadow.
4. Use lines, dots, shapes, and value to create the illusion of texture.
5. Organize colors on a color wheel to show the following relationships:
    a. Red, blue, and yellow can be mixed to make most other colors.
    b. Secondary colors are derived by mixing the primary colors.
    c. White added to a color produces a "shade;" gray added to a color produces a tone; black added to a color produces a tint.
    d. White, black, gray, and brown are called "neutrals."

6. Change the value of a color by mixing it with a lighter or darker color with white or black.
7. Use aerial perspective to create an illusion of depth such as:
   a. Distant objects appear flatter and less detailed than do objects in the foreground.
   b. The color of distant objects seems grayer and sometimes bluer than that of foreground objects.
8. Complete one transparent and one opaque painting.
9. Block in an original subject, design, or a selected model.
10. Use appropriate mediums in mixing and applying paint.
11. Mix colors both on a palette and on the painting.
12. Maintain painting equipment.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by telling how painters use elements and principles of design in their art and by discussing the relationships among frames, paintings, and the environment. (Observer/ Listener)

OBJECTIVES

1. Use any of the elements to relate parts of a composition to each other and tell how painters relate parts of a picture.
2. Point out how artists used contrast to create a point of emphasis (a focal point) in art prints.
3. Point out how artists use contrast between plain and detailed areas and create tension between planes.
4. Describe ways in which artists have used repetition of lines, shapes, textures, values, and colors to help unify a composition.
5. Discuss ways in which a frame should enhance a painting and a painting should influence a room.

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STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by discussing the design and formal qualities found in various art prints, identifying famous painters, and understanding the related vocabulary. (Critic)

OBJECTIVES

1. Point out ways in which painters:
    a. Create the illusion of movement in a composition.
    b. Extend part of an object beyond the boundaries of a picture plane.
    c. Organize space both formally and informally, or adjust the placement and optical weight of objects to achieve balance.
    d. Use the psychological effects of colors.
        (1) Pure colors are more dominant than gray colors.
        (2) Cool colors can be mixed with warm colors to "cool" them; warm colors can be mixed with cool colors to "warm" them.
        (3) Warm colors seem to advance and cool colors seem to recede.
    e. Mix colors with varying effects.
        (1) When two complements are mixed, each becames grayer. When placed side by side, they seem to intensify the brilliance of each other.
        (2) The intensity of a color is reduced when it is mixed with various amounts of its complement or with gray.
    f. Understand the effects that various properties of color have on each other such as:
        (1) Three properties of color are hue, value, and intensity.
        (2) Shadows are darker versions of the color upon which they fall.
        (3) Opaque and translucent materials reflect colors in their own unique way.
2. Identify three professions related to painting.

3. Name three artists famous for their painting skills and one local painter. For example:

   Jan Van Eyck
   Rubens
   Cezanne
   Leconte Stewart (local)
   V. Douglas Snow (local)
   Rembrandt
   Monet
   Picasso
   Caravaggio
   Wyeth (contemporary)

4. Define the following painting vocabulary:

   transparent
   bright brush
   aquerelle brush
   impasto
   opaque
   wash
   long brush
   palette
   glaze
   dry brush
   medium
   round brush
   ground
   scumble
   wet in wet

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Printmaking I (Core Option)	.5	Foundations II

COURSE DESCRIPTION

Printmaking I is an extension of the Foundations I and II courses and includes processes such as silkscreen, etching, block print, and wood cut. Competencies for each of the basic concepts and skills will be assessed. Higher level thinking skills and art criticism should be build into every lesson taught.

STANDARD 1

The students will develop skills vital to graphic expression by creating a design for one of the printing processes, by using basic drawing concepts, and by following the steps required in one or more printmaking process. (Participant)

OBJECTIVES

1. Use structural lines to define the planes or surfaces of objects.
2. Render the scale (or size relationship) of objects.
3. Create the illusion of form with a light source and areas of highlight, halftone, shadow edge, reflected light, and cast shadow.
4. Use linear perspective to create the illusion of depth.
5. Use lines to warp the surface and to describe the contour, the framework, and the parts of an object.
6. Use lines, dots, shapes, and value to create the illusion of texture.
7. Render objects that appear foreshortened.
8. Create tints, shades, and tones of any color.
9. Mix any two colors and predict the outcome.
10. Create an original design or select an appropriate model and then follow the sequence of steps necessary to produce either a silkscreen, intaglio, linoleum blockprint, or woodcut.

a. Linoleum blockprint or woodcut

  (1) List the limitations of the material to be carved (linoleum, masonite, pine, fir, cherry, or alder wood).

  (2) Carve the material to produce a positive or negative design, e.g., white on black or black on white.

  (3) Ink the block with a brayer and get a consistent value.

  (4) Burnish the paper to pull a proof.

  (5) Use tools such as knives, gauges, burins, gravers, brayers, and bench hooks properly.

  (6) Carve and print two blocks for a two-color print.

b. Silkscreen

  (1) Construct and maintain a screen.

  (2) List various screen blocking materials, appropriate inks, and cleaning methods for each.

  (3) Design a positive/negative (figure and background) motif for prints made by (a) paper stencils--torn or cut; (b) Tusche resist; (c) glue-shellac or photo emulsion; (d) crayon resist.

  (4) Print a single color in one run using two of the above methods.

  (5) Print two colors in two runs using one of the above methods.

  (6) Print three colors in two runs using one of the above methods.

c. Intaglio

  (1) Recognize differences between engraving, dry point, etching, mezzotint, aquatint, embossing.

  (2) Identify tools, grounds, inks, plates, papers, and other materials appropriate to two of the above methods.

  (3) Develop a design for one of the above methods.

  (4) Cut the design into an appropriate plate.

  (5) Ink and wipe the plate.

  (6) Prepare paper for printing.

(7) Pull proof.

(8) Run an edition.

(9) Dry and mount prints.

(10) Clean plates.

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by telling how printmakers use both design and formal qualities to increase the aesthetic quality of their prints. (Observer/Listener)

OBJECTIVE

1. Point out ways in which printmakers have used the following objectives in their prints:
   a. Use any of the elements to relate parts of a composition to each other.
   b. Use contrast to create a point of emphasis (a focal point).
   c. Maintain variety with unity by using variations in the elements, use contrast between plain and detailed areas, create tension between planes.
   d. Use specific devices to assist in the aesthetic grouping of shapes and forms.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by discussing the vocabulary, composition, and formal qualities of printmaking and by discussing artists well known for their prints. (Critic)

OBJECTIVES

1. Point out ways in which the following objectives have been used by printmakers:
   a. Create the illusion of movement in a print.

b. Alter negative as well as positive spaces to produce a more interesting composition.

c. Use related, contrasting, and neutral color schemes to affect the mood or feeling of a print.

d. Create moods or feelings in a print with value keys.

e. Organize space both formally and informally, or adjust the placement and optical weight of objects to achieve balance.

2. Define basic printmaking terms:

incise
relief
planographic process
intaglio
dry point
wood cut
blockprint
brayer
gauge
burin
graver
benchhook
engraving
etching
acid bath
ground
messo
tint
burnisher
etching plate
emboss

3. Names at least three artists famous for their printmaking skills and one local printmaker. For example:

Rembrandt
F. Goya
H. Daumier
Toulouse Lautrec
Hokusai
A. Durer
W. Blake
A. Warhol
Moishe Smith (local)
Baskin

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Commercial Art I (Core Option)	.5	Foundations II

COURSE DESCRIPTION

Commercial Art I is an extension of the Foundations I and II courses and contains instruction on basic techniques and skills relating to lettering, layout, illustration, and mechanicals. Higher level thinking skills and art criticism should be built into every lesson taught. Competencies for each concept basic to this course will be assessed.

STANDARD 1

The students will develop skills vital to graphic expression by using a variety of painting techniques, media, concepts, and tools in creating a commercial art design. (Participant)

OBJECTIVES

1. Recognize squares, circles, triangles, and their variations in letters of the alphabet, logos, and other aspects of commercial design.
2. Repeat letters, shapes, or blocks of copy in a layout or composition.
3. Render the scale (or size relationship) of objects.
4. Create the illusion of form with a light source and areas of highlight, halftone, shadow edge, reflected light, and cast shadow.
5. Use lines, dots, shapes, and value to create the illusion of texture.
6. Create a point of emphasis in a logo, layout, or other commercial art work.
7. Create the illusion of movement in a layout or composition by repeating shapes or colors.
8. Create a mechanical that indicates the printing of two colors.
9. Alter positive and negative space to produce a more interesting layout or composition.

10. Use a proportion calculator to indicate the enlargement or the reduction of type, a photograph, or an illustration.

11. Use a pica ruler to specify the length of a given amount of type.

12. Alter the color, value, or texture of a form to improve its sales impact on a potential customer.

13. When assigned a problem:

    a. Use thumbnail sketches to visualize several solutions.

    b. Select one solution from the sketches.

    c. Choose, "spec," and/or develop lettering.

    d. Complete a finished layout or product.

14. Extend parts of an object beyond the boundaries of a picture plane, e.g., bleeding illustrations or photographs off the edge of the paper.

15. Use media, tools, and materials such as:

    felt tip pens and markers
    technical fountain pens
    airbrush
    colored pencils
    water colors
    red sable watercolor brush
    t-square
    triangles
    templates
    rubber cement
    proportion calculator
    x-acto knife
    pica ruler
    velum and/or acetate
    illustration board
    lettering brush
    speedball pens
    ruby/amberlith
    compass
    masking tape

STANDARD 2

The students will develop perceptions vital to judging and creating aesthetic form by recognizing when basic design elements are effectively used in commercial art. (Observer/Listener)

OBJECTIVES

1. Show how commercial artists use basic elements to relate parts of a composition to each other.

2. Point out ways in which commercial artists have organized space formally, informally, or a combination of both and adjusted the placement and optical weight to achieve balance.

3. Create unity in a composition or layout. Point out ways in which commercial artists have accomplished the same goal in their own work.

4. Point out ways in which commercial artists maintain variety with unity.

STANDARD 3

The students will develop skills for understanding works of art and the cultures that produced them by identifying well-designed commercial art and printing processes (and their characteristics); by describing a variety of commercial art vocations; and by telling how commercial artists use propaganda techniques. (Critic)

OBJECTIVES

1. Describe the illusion of movement in a commercial art composition.

2. Identify letterpress or relief printing, offset lithography, photo gravure or intaglio, silkscreen, steel die or copperplate engraving, and embossing printing processes. Tell how they differ from one another.

3. Identify five vocations from the following list and describe the responsibilities of each:

   illustrator
   fashion illustrator
   mechanical illustrator
   cartooning
   sign painting
   architectural rendering
   full color illustrating
   calligraphy
   production artist
   set designer
   photography
   layout artist
   product designer
   animation
   story board artist
   textile designer
   TV production
   advertising design

4. Describe ways in which neatness and craftsmanship affect the acceptance of a product by the client.

5. Identify three or more propaganda techniques that might be used to influence the purchasing of commercial products.

6. Name three artists famous for their work as illustrators or designers in commercial art.

7. Define the following commercial art vocabulary:

logo
layout
mechanical
full-color printing
intaglio
embossed
proportion calculator
pica ruler
thumbnail sketch
specs
silkscreen
story board
bleeding
letter press
off set
lithography
engraving
calligraphy

FIELD TRIAL

DANCE COMPONENT

(Creative Movement)

K - 3

PREFACE

The K-3 dance objectives emphasize the qualities that turn movement into dance. All of them are to be achieved as group activities. It is recommended that the objectives be incorporated with Healthy Life-styles--movement, fitness, and health.

Standards 1 and 4 encourage understanding and experience with the participant and observer/listener roles, while Standards 2 and 3 encourage growth and understanding for the critics role in dance.

Note that when the term energy is used, we are talking about the release, follow through, and termination of energy creating a quality of motion which is the key to making movement become dance. The basic qualities of motion are percussive (sharp and quick), sustained, vibratory (trembling, collapsing, swinging, rebounding, and exploding).

NOTE: The K-6 Dance Core is taught as part of the Movement, Fitness Core.

Level K

STANDARD 1	The students will perform introductory rhythm and dance movements that include time, space, energy, and shape. (Participant, Observer/Listener)

OBJECTIVES

1. Clap and move to the beat of various tempos (slow, medium, and fast).
2. Clap and move to simple rhythmic patterns based on such things as the syllables of names or other words.
3. Explore spatial concepts such as high-low, in-out, large-small, forward-backward, sideways and turning.
4. Create curved, straight, bent, and twisted shapes with the body.
5. Experience traveling through space: walking, running, hopping, jumping, galloping, and skipping.

6. Express through motion such things as textures, colors, senses, and emotions. (To stimulate exploration, the teacher might use words such as sad, happy, noisy, quiet, rough, smooth, red, pink, etc.)
7. Perform traditional and creative singing games and dances such as "Looby Loo," "London Bridges," "Did You Ever See A Lassie?"

STANDARD 2

The students will express feelings generated by observing and participating in dance. (Critic)

STANDARD 3

The students will participate in simple dances that reflect one or more cultures. (Participant)

Level 1

STANDARD 1

The students will continue to perform introductory rhythm and dance movements that include time, space, energy, and shape. (Participant, Observer/Listener)

OBJECTIVES

1. Clap and move, accenting the first beat of every measure in 4/4 time.
2. Clap and move to simple rhythmic patterns based on such things as phrases or whole sentences.
3. Create symmetrical and asymmetrical shapes with the body.
4. Through movement, explore over/under, above/below, near/far, in front/behind, inside/outside, and around/through.
5. Move through space in various directions, e.g., walking, running, leaping, hopping, jumping, skipping, galloping, and sliding.
6. Improvise a sequence of energy (motion) changes, i.e., moving from lyrical (floating, gliding) to percussive (sharp, quick).
7. Perform traditional and creative singing games and dances such as "Bear Growl," "Statue Games," Jolly Is The Miller," "Muffin Man."

STANDARD 2

The students will express feelings generated by observing a dance. (Critic)

OBJECTIVES

1. Watch a dance (live, film, or video) and talk about the different kinds of movements.
2. Imitate, draw, or tell how a dance creates different feelings, moods, or expressions.

STANDARD 3

The students will identify dances from several different cultures. (Critic)

Level 2

STANDARD 1	The students will combine introductory rhythm and dance movements that include time, space, energy, and shape. (Participant, Observer/Listener)

OBJECTIVES

1. Clap and move, accenting the first beat of every measure in 2/4, 3/4, and 4/4 time.
2. Express the beat (2/4, 3/4, or 4/4 time) by changing the body part (arm, leg, etc.) the direction, the level, or the energy.
3. Clap the rhythmic pattern of a nursery rhyme, then move to the pattern individually or with a partner ending in a strong dramatic pose.
4. Create symmetrical and asymmetrical shapes with the body, alternating from one to the other.
5. Move through space changing the shape of the body at least three times.
6. Improvise a sequence of energy (motion) changes, i.e., moving from lyrical (floating, gliding) to percussive (sharp, quick). Use an occupation as a theme.
7. Perform traditional and creative singing games and dances such as "Round and Round The Village," "Bingo," "Here We Go Round the Mountain."

STANDARD 2	The students will identify how a dance creates feelings. (Critic)

OBJECTIVES

1. Describe what parts of a dance create a particular feeling or impression.
2. Tell or write what a choreographer might want one to think or feel.

STANDARD 3

The students will create a simple dance relating to one for more cultures. (Participant)

Level 3

STANDARD 1	The students will continue to combine introductory rhythm and dance movements that include time, space, energy, and shape. (Participant, Observer/Listener)

OBJECTIVES

1. Clap and move in 6/8 time, accenting the first beat of every measure, changing the body part, the direction, the level, or the energy.

2. Move appropriately to a piece of 4/4 music or to a steady beat, e.g., slowly to half notes, moderately to quarter notes, and quickly to eighth notes.

3. With a small group, create a simple dance using the rhythmic pattern of a nursery rhyme, words, or names.

4. Discuss differences between rhythms that can be counted and rhythms that cannot be counted.

5. Express through movement the rhythms found in: (a) nature, e.g., wind, sea, and trees; (b) the body, e.g., breath, pulse, sneeze and tickle; (c) objects-mechanical and nonmechanical, e.g., ball, feather, and eggbeater.

6. Create simple combinations of moving forward, backward, sidewards.

7. Create a series of shapes on different levels (low, medium, and high) and design transitions between them, e.g., slow-motion and sustained, sudden or percussive.

8. Improvise a sequence of energy (motion) changes, e.g., moving from lyrical (floating, gliding) to percussive (sharp, quick).

9. Perform traditional and creative singing games and dances such as "Skip To My Lou," "Digga Doo," "Jim Along Josie."

STANDARD 2	The students will develop an understanding of why people dance. (Critic)

OBJECTIVES

1. Brainstorm about why people dance.
2. Discuss dance as a form of nonverbal communication.

STANDARD 3	The students will discuss some of the dances of the cultures studied at Level 3 Geography. (Critic/Participant)

OBJECTIVES

1. Create a simple group dance from a theme such as planting and harvesting, the cycle of the seasons, animal life cycles, or dances based on work activities.

DANCE COMPONENT

(Introduction to Dance Forms)

4 - 6

PREFACE

The 4-6 dance objectives emphasize the qualities that turn movement into dance. They form a foundation for dance at the secondary level. All of the activities should be taught as individual or small group activities. It is recommended that the objectives be incorporated with Healthy Life-styles--Movement, Fitness, and Health program. Standards 1 and 4 encourage understanding and experience with the participant and Observer/Listener roles, while Standards 2 and 3 encourage growth and understanding for the critics role in dance.

Level 4

STANDARD 1	The students will identify and perform a variety of individual dance forms and participate in group dances. (Participant, Observer/Listener)

OBJECTIVES

1. Recognize simple musical forms such as ABA, and simple rounds, and create movement using these forms.

2. Focus with eyes and body parts while dancing, on different levels and in different directions, i.e., focusing with eyes, chest, elbow, knee, and back.

3. Dance simple rhythmic patterns with various kinds of musical accompaniments. Repeat the rhythmic patterns while adding movement qualities such as sustained, percussive, swing, collapse, and vibratory movements.

4. Create a simple diagram for movement using straight and curved lines and then perform it.

5. Perform basic square dance patterns, e.g., right hand and left hand, both hands around, star, promenade, do-si-do.

6. Perform several traditional folk or national dances such as "Horse and Buggy, "Schottische, "Gustof's Skoal," "Seven Jumps," "Old Dan Tucker," etc.

STANDARD 2	The students will begin to analyze dance. (Critic)

OBJECTIVES

1. Describe another group's dance performance.
2. Identify elements of motor fitness a dancer has to have, e.g., strength, flexibility, endurance, balance, coordination, agility, control.
3. Identify the three parts of a dance, i.e., beginning, middle, and ending.

STANDARD 3	The students will begin to identify the cultural origins of dance. (Critic)

OBJECTIVES

1. Identify dances associated with Utah's pioneer culture.
2. Invent a dance that the pioneers or indians might have danced.

STANDARD 4	The students will begin to develop their imaginative thinking in dance. (Participant, Observer/Listener)

OBJECTIVES

1. Pantomime sports activities and abstract them into dance. Abstraction can be created by:
    a. Exaggeration (over or under statement).
    b. Distortion.
    c. Repetition.
2. Create their own movement sequence (choreography) or dance.

    NOTE: Students may use one of their previous experiences and convert it into a movement sequence. Teachers may assist students by reminding them that a dance should have a beginning, a middle, and an end.

LEVEL 5

STANDARD 1

The students will expand their dance skills and interpretation through a variety of dance experiences. (Participant, Observer/Listener)

OBJECTIVES

1. Experience spatial relationships of meeting, parting, passing, leading, following and mirroring (through improvisation and choreography).
2. Clap and move to complex rhythm patterns. Perform in place, through space, by changing the floor pattern, and through spatial relationships. (Small group activity)
3. Using a combination of two or more movements, demonstrate accents of energy changes involving body parts, directions, and levels.
4. Create and perform a phrase, or short dance, with a sequence taken from a list of energy words, e.g., hover, slither, slash, press, and perch.
5. Participate in an aerobic dance/exercise routine to music for eight minutes.
6. Perform several traditional folk or national dances, e.g., "The Virginia Reel, "Galopede," Hora," "Oh, Johnny," "Patty Cake Polka."

STANDARD 2

The students will continue to analyze dance. (Critic)

OBJECTIVES

1. List ways dancers move in a performance. Discuss/show how dancers move differently than one would expect of people in everyday life.
2. Select three ideas and discuss/show what a dance would be like if the dance were:
   a. Performed in another setting.
   b. Performed in different costumes.

c. Performed with/without sound.
d. Performed by people of different sex or age.
e. Performed at different tempos.
f. Performed with/without props.
g. Performed with a different ending.

STANDARD 3

The students will continue to identify the cultural origins of dance. (Critic)

OBJECTIVES

1. Identify dances associated with cultures of the Western Hemisphere.

2. Learn two or more dances from Western Hemisphere cultures and discuss how the environment and/or customs influenced these dances. Examples:

   Cha-Cha - Cuba
   Mexican Hat Dance - Mexico
   Smoky Mountain Clog - America

STANDARD 4

The students will continue to develop their imaginative thinking in dance. (Participant, Observer/Listener)

OBJECTIVES

1. Pantomime simple poems, then extract them into dance using exaggeration, distortion, or repetition.

2. Create their own movement sequence (choreography).

   NOTE: Students may use one of their previous experiences and convert it into a movement sequence. Teachers may assist students by reminding them that a dance should have a beginning, a middle, and an end.

FIELD TRIAL

LEVEL 6

STANDARD 1	The students will expand their dance skills and interpretation through a variety of dance experiences. (Participant, Observer/Listener)

OBJECTIVES

1. Create, in a small group, a diagram for movement using curved, straight, and zigzag paths and then perform it as a group.
2. Move in syncopation. (Syncopation means an accent in an unexpected place, such as accenting the second beat of a 4/4 meter instead of the first beat.)
3. Clap and move to complex rhythmic patterns.
4. Improvise a simple dance based on a musical selection that suggests changes in quality and energy.
5. Participate in an aerobic dance/exercise routine to music for twelve minutes.
6. Improvise a group dance reflecting another culture.
7. Perform several traditional folk or national dances such as "Troikla," "Tinikling," "Jessie Polka," and "Sauerlander Quadrille," etc.
8. Dance a number of contemporary dances.

STANDARD 2	The students will continue to analyze dance. (Critic)

OBJECTIVES

1. After watching a dance (live, film, or video) describe how it began, what the middle was like, and how it ended.
2. Discuss how the use of costumes, accompaniment, props, lighting, and scenery contribute to dance.

STANDARD 3

The students will continue to identify the cultural origins of dance. (Critic)

OBJECTIVES

1. Discuss dances associated with cultures of the Eastern Hemisphere.

2. Learn two or more dances from Eastern Hemisphere cultures and discuss how the environment and/or customs influenced these dances. Examples:

   Quadrille - English
   Hora - Israel
   Jig - Irish
   Schottische - Scotland
   Polka - Czechoslovakia
   Tinikling - Phillipines

STANDARD 4

The students will continue to develop their imaginative thinking in dance.
(Participant, Observer/Listener)

OBJECTIVES

1. Pantomime a painting or sculpture, then abstract it into dance using exaggeration, distortion, and/or repetition.

2. Create their own movement sequence (choreography).

   NOTE: Students may use one of their previous experiences and convert it into a movement sequence. Teachers may assist students by reminding them that a dance should have a beginning, a middle, and an end. Identify such things as repetition, climax, transition, unity, variety, and contrast.

LEVEL 9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Beginning Dance	.05	Mastery of K-8 core

COURSE DESCRIPTION

This course provides experience in dance technique and the development of such things as physical strength, flexibility, endurance, and coordination. Students will expand their dance vocabulary and skills, and develop their creative powers through improvisation, choreography, and performance. Students will also be exposed to the history of dance and its cultural origins. Focus should be on an experiential approach using activities which utilize large groups.

STANDARD 1	The students will increase their physical strength, flexibility, endurance, agility, alignment, coordination, and balance through dance. (Participant)

OBJECTIVES

1. Develop overall flexibility with particular attention given to lateral stretch of the torso, upper back and shoulders, hip joints, and ham strings.
2. Develop overall strength with particular attention given to feet and ankles, legs, abdomen, and shoulder girdle.
3. Develop overall postural alignment according to functional body mechanics. Postural problems such as pronation, hyper-extended knees and lower back, forward head tilt, and rounded shoulders should receive special corrective attention.
4. Develop overall agility with particular attention given to quickness and ease of changing direction in place and through space.
5. Develop overall coordination with simple body part isolation and combinations.
6. Develop balance with an awareness of one's center of gravity over the base of support.
7. Develop endurance through a gradual increase in the length, speed, and energy required in dance combinations.

STANDARD 2

The students will develop their dance technique through experiences with space, time, and energy. (Participant)

OBJECTIVE

1. Develop use of space:
    a. Body dimensions: breadth, height, width.
    b. Body facing: forward, backward, sidewards, diagonal, and turning.
    c. Body shaping: curved and straight lines.
    d. Shape relationship: solo, partner, and group with transitions.
    e. Spatial paths: straight, curved, or combination; focus, eye or body.
    f. Level: high, medium, low, air and ground.

2. Develop use of time:
    a. Fast and slow tempo.
    b. Even and uneven intervals.
    c. Accent.
    d. Meter (duple, triple).
    e. Rhythmic Phrase.
    f. Syncopation.
    g. Breath (non-metered) rhythms.

3. Develop use of energy:
    a. Force: tension and relaxation (weak and strong)
    b. Qualities of motion: sustained, percussive, vibratory, collapsing, swinging, suspending, exploding, rebounding.
    c. Change in dynamics.

STANDARD 3

The students will continue to develop their imaginative thinking in dance. (Participant, Observer)

OBJECTIVES

1. Choreograph several phrases and at least three studies; e.g, an eight-count phrase, a phrase with three contrasting qualities of motion, a traveling phrase with three changes of direction, and a phrase which includes repetition and stillness.

2. Perform studies and phrases for classmates.

STANDARD 4	The students will continue to analyze dance. (Observer/Critic)

OBJECTIVES

1. Identify and discuss a technique sequence, a group study, a group improvisation and a group choreography.
2. Discuss what makes a dance interesting, how the elements of dance are used (time, space, shape, and energy), and how could the dance have been improved.
3. Write a critique of selected dance performances. Critiques should include discussion of sensory, technical, formal, and emotional properties of the dance or other aspects of dance assigned by the teacher.

STANDARD 5	The students will begin to examine the history of dance and its cultural origins. (Critic)

OBJECTIVES

1. Identify and discuss the historical periods of dance, e.g., primitive, medieval, and preclassic.
2. Identify and discuss the cultural origins of three dances, e.g., square, ballroom, modern, ballet, folk, tap.

FIELD TRIAL

LEVEL 9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Intermediate & Advanced Dance	1.0	Beginning Dance

COURSE DESCRIPTION

This course provides experience in dance technique and the development of such things as physical strength, flexibility, endurance, and coordination. Students will expand their dance vocabulary and skills, and develop their creative powers through improvisation, choreography, and performance. Students will also be exposed to the history of dance and its cultural origins. The focus should be on composition in small group units.

STANDARD 1

The students will continue to increase their physical strength, flexibility, endurance, agility, alignment, coordination, and balance through dance. (Participant)

OBJECTIVES

1. Increase flexibility with particular attention given to lateral stretch of the torso, upper back and shoulders, hip joints, and ham strings.
2. Increase strength with particular attention given to feet and ankles, legs, abdomen, and shoulder girdle.
3. Increase postural alignment according to functional body mechanics. Postural problems such as pronation, hyper-extended knees and lower back, forward head tilt, and rounded shoulders should receive special corrective attention.
4. Increase agility with particular attention given to quickness and ease of changing direction in place and through space.
5. Increase coordination with simple body part isolation and combinations.
6. Increase balance and off-balance with an awareness of one's center of gravity over the base of support.
7. Increase endurance through a gradual increase in the length, speed, and energy required in dance combinations.

430

STANDARD 2

The students will continue to expand their dance techniques. (Participant)

OBJECTIVES

1. Increase use of space:

    a. Body dimensions: breadth, height, width.
    b. Body facing: forward, backward, sidewards, diagonal, and turning.
    c. Body shaping: curved and straight lines.
    d. Shape relationship: solo, partner, and group with transitions.
    e. Spatial paths: straight, curved, or combination; focus, eye or body.
    f. Level: high, medium, low, air and ground.

2. Increase use of time:

    a. Fast and slow tempo.
    b. Even and uneven intervals.
    c. Accent.
    d. Meter (duple, triple).
    e. Rhythmic Phrase.
    f. Syncopation, accumulative, decumlative, resultant rhythm.
    g. Breath (non-metered) rhythms.
    h. Combinations of the above.
    i. Musical forms (ABA, Rondo, Fugue, Canon, Ground Bass, Theme and Variation, etc.).

3. Increase use of energy:

    a. Force: tension and relaxation (weak and strong).
    b. Qualities of motion: sustained, percussive, vibratory, collapsing, swinging, suspending, exploding, rebounding.
    c. Dynamic change of energies (example: move from sustained to percussive).

STANDARD 3

The students will continue to develop their imaginative thinking in dance. (Participant)

OBJECTIVES

1. Respond spontaneously to verbal commands which include more qualitative words and words with more poetic imagery such as float, skitter, dart, melt, dodge, collect, and hide. Make combinations of incongruous ideas such as snapping cotton, rigid noodles, shattered clouds.

2. Mirror a partner's movement that has been quickly improvised trying to retain the quality and form. (This activity could be performed in large groups with alternating leaders.)

3. Translate the forces of nature through dance, i.e, gravity and inertia, balance and off balance, centrifugal and centripetal force. (In partners, work with connected shapes and the ideas of push, pull, cantilever, support, one person stationary and the other moving.)

4. Choreograph and perform short studies of symmetrical and asymmetrical shapes and connected shapes that travel straight and curved lines.

5. Choreograph and perform short studies including floor patterns, entrances and exits, geometric designs, small and large spaces, and confined and expanding spaces.

6. Choreograph and perform a dance with accumulative, decumulative, or resultant rhythm.

7. Choreograph and perform a dance based on breath rhythms.

8. Choreograph and perform a dance using two or all three of the qualities of motion.

STANDARD 4	The students will evaluate dance performances. (Observer/Critic)

OBJECTIVES

1. Write evaluations of selected live, filmed, and video taped dance performances based on the following questions.

   a. Was the dance pleasing?
   b. Did it solve the problem?
   c. Was it interesting?
   d. Was it logical?
   e. How were the different elements of dance used?
   f. How were transitions used?
   g. Did it make a statement?

STANDARD 5	The students will increase their knowledge of the history of dance and its cultural origins. (Critic)

OBJECTIVES

1. Research, discuss, and write a brief history of dance and its cultural origins, including contemporary societies.

DRAMA COMPONENT

K - 3

PREFACE

Grades K-3 should emphasize helping the child feel confident and happy about acting with others in a classroom dramatic unit. Emphasis is placed on creative drama infused into the regular classroom curriculum. Some creative drama activities can be used along with beginning dance.

LEVEL K

STANDARD 1	The students will become aware of the five senses. (Participant)

OBJECTIVES

1. Identify the five senses and tell how each is used.
2. Heighten awareness of all five senses.

STANDARD 2	The students will begin to develop public speaking skills through playacting of real or imaginary ideas. (Participant)

OBJECTIVE

1. Express real or imaginary ideas through playacting.

STANDARD 3	The students will develop a sense of personal and general space in relationship to others. (Participant)

OBJECTIVE

1. Demonstrate control in the use of personal space within a large group.

STANDARD 4	The students will identify sequence in drama. (Observer/Listener, Critic)

OBJECTIVE

1. Retell the sequence of events in a simply play or story.

STANDARD 5	The students will begin to develop appropriate behavior when viewing and listening to a dramatic performance. (Observer/Listener, Critic)

OBJECTIVE

1. Identify appropriate behavior when viewing and listening to short theatrical performances.

STANDARD 6	The students will use appropriate sound effects in simple stories or plays. (Participant, Critic)

OBJECTIVE

1. Produce simple sound effects for stories or plays.

FIELD TRIAL

LEVEL 1

STANDARD 1	The students will develop each of the five senses. (Participant)

OBJECTIVE

1. Use each of the five senses, one at a time, to interpret the environment.

STANDARD 2	The students will develop public speaking skills with peers. (Participant)

OBJECTIVES

1. Memorize and recite short selections.
2. Participate in choral speaking with peers.

STANDARD 3	The students will develop body awareness and expression of emotions. (Participant)

OBJECTIVES

1. Demonstrate different ways the body and its parts can move, such as pushing/pulling, reaching/bending, lifting/dropping, etc.
2. Use the face, voice, and body to express emotions (e.g., happiness, surprise, and fear).

STANDARD 4	The students will identify simple characters in drama. (Observer/Listener, Critic)

OBJECTIVE

1. Create a simple character through actions.

STANDARD 5	The students will begin to develop appropriate behavior when viewing and listening to a dramatic performance. (Observer/Listener

OBJECTIVE

1. Identify appropriate behavior when viewing and listening to short theatrical performances.

STANDARD 6	The students will demonstrate the use of simple props in plays. (Participant, Critic)

OBJECTIVE

1. Construct simple props for stories or plays.

LEVEL 2

STANDARD 1

The students will mimic responses to each of the five senses. (Participant)

OBJECTIVE

1. Pantomime the use of each of the senses, e.g., tasting a lemon, touching a hot plate, hearing a loud noise.

STANDARD 2

The students will develop public communication skills before groups of their peers. (Participant)

OBJECTIVES

1. Participate in planning and organizing an improvisation with others.
2. Speak before a group of peers, e.g., "Show and Tell."

STANDARD 3

The students will improvise their body movements and voices in response to various stimuli. (Participant)

OBJECTIVES

1. Improvise body movements in response to pictures, sounds, music, stories, etc.
2. Improvise with the voice in response to pictures, sounds, music, or stories, etc.

STANDARD 4

The students will develop simple characters. (Observer/Listener, Critic)

OBJECTIVE

1. Develop a dialogue and actions appropriate for characters in a story or play.

STANDARD 5

The students will begin to develop appropriate behavior when viewing and listening to a dramatic performance. (Observer/Listener, Critic)

OBJECTIVE

1. Identify appropriate behavior when listening to and viewing a short theatrical performance by peers or others.

STANDARD 6

The students will create and present a puppet (paper sack, finger, etc.) play. (Participant, Critic)

OBJECTIVES

1. Create and operate a puppet to represent a given character.
2. Create simple sets for a puppet play.

LEVEL 3

STANDARD 1

The students will pantomime the five senses in a short story (skit). (Participant)

OBJECTIVE

1. Pantomime seeing, hearing, tasting, touching, and smelling in a short story (skit).

STANDARD 2

The students will develop public communication skills working in a group. (Participant)

OBJECTIVES

1. Participate in a group improvization of a story.
2. Stay in character in a short play or skit.

STANDARD 3

The students will speak expressively with emphasis on vocal inflections and body gestures. (Participant)

OBJECTIVES

1. Speak expressively in a choral or storytelling situation.
2. Show understanding of how meaning is influenced by pitch, rate, force, tone, and other vocal variables.
3. Describe the feelings portrayed in a given picture or situation.

STANDARD 4

The students will identify the three basic elements of a simple play or story. (Observer/Listener, Critic)

OBJECTIVE

1. Identify the setting, plot, and characters in a simple play or story.

STANDARD 5

The students will demonstrate appropriate behavior for listening or viewing a dramatic performance including stage, film, or television and express their reactions to the performance. (Observer/Listener, Critic)

OBJECTIVES

1. Demonstrate and discuss appropriate behavior when listening to and viewing a theatrical performance.
2. Discuss personal reactions after viewing a television or theatrical performance.

STANDARD 6

The students will identify and make simple props to help develop a character, including masks, for plays or skits. (Participant)

OBJECTIVES

1. Make simple masks.
2. Identify items of costuming appropriate to a given character.

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DRAMA COMPONENT

4 - 6

DRAMA COMPONENT

Levels 4-6 should build on dramatic skills developed earlier. Playmaking is introduced with emphasis on using drama as a learning medium. Drama should become a strategy for enriching other areas of the curriculum.

LEVEL 4

STANDARD 1	The students will develop planning skills for group performances. (Participant)

OBJECTIVE

1. Work cooperatively during group planning sessions for improvisations or story dramatizations.

STANDARD 2	The students will move and read short passages expressively. (Participant)

OBJECTIVES

1. Demonstrate appropriate movements and actions to communicate size, shape, and weight of imaginary objects.
2. Read a line displaying a given emotion.

STANDARD 3	The students will infer physical details of a given character. (Observer/Listener, Critic)

OBJECTIVE

1. Describe the physical characteristics, when they are not directly stated, of a given character in a story or play.

STANDARD 4	The students will state whether they liked a dramatic performance on television and explain why. (Observer/Listener, Critic)

OBJECTIVES

1. Respond to a dramatic performance on television.
2. Explain the reasons for their responses.

STANDARD 5	The students will demonstrate how a costume contributes to the development of a given character. (Participant, Critic)

OBJECTIVE

1. Create a character appropriate for a given costume piece.

LEVEL 5

STANDARD 1

The students will develop dramatic skills by giving and using valid criticism. (Participant, Critic)

OBJECTIVES

1. Offer constructive criticism to peers of various dramatic activities.
2. Identify and use valid criticism from peers.

STANDARD 2

The students will create valid physical and emotional responses for a character given or implied from a play or short story. (Participant)

OBJECTIVES

1. Create valid physical and emotional responses of a character from information given or implied by story material.
2. Improvise a vocal and physical response to a given emotion.

STANDARD 3

The students will identify the conflict in simple dramatic productions. (Observer/Listener, Critic)

OBJECTIVE

1. Identify the conflict in simple dramatic productions, for example, hero versus villain.

STANDARD 4	The students will state whether they liked a dramatic performance (film and television) and explain why. (Observer/Listener, Critic)

OBJECTIVES

1. Respond to dramatic performances on television and film.
2. Explain the reasons for their responses.

STANDARD 5	The students will identify the various careers in commercial drama. (Observer/Listener, Critic)

OBJECTIVE

1. Identify career names for different jobs involved in dramatic productions (e.g., designer, technician, and actor).

LEVEL 6

STANDARD 1

The students will develop dramatic skills by giving and using valid criticism. (Participant, Critic)

OBJECTIVES

1. Offer constructive criticism to peers of various dramatic activities.
2. Recognize and use valid criticism from peers.
3. Develop sensitivity toward the feelings of others through role playing and improvising conflict situations.

STANDARD 2

The students will create valid vocal responses for a character given or implied from a play, short story, or picture. (Participant)

OBJECTIVES

1. Use the voice to convey elements of characterization such as age, attitude, and education.
2. Improvise a vocal response suggested by a given picture.

STANDARD 3

The students will write a simple dramatic production. (Participant, Critic)

OBJECTIVE

1. Create a story dramatization with a group of peers including plot, conflict, setting, and characters.

STANDARD 4	The students will state whether they liked a dramatic performance (stage, film, and television) and explain why. (Observer/Listener, Critic)

OBJECTIVES

1. Respond to dramatic performances on stage, film, and television.
2. Explain reasons for their responses.

STANDARD 5	The students will create simple sets for a dramatic production. (Participant, Critic)

OBJECTIVE

1. Plan and make simple scenery for story dramatizations.

FIELD TRIAL

DRAMA COMPONENT

Level 7

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Drama	.0*	Mastery through Level 6

*No credit; integrated in Language Arts

PREFACE

The standards and objectives that follow should be integrated into the Level 7 Language Arts Curriculum, not taught separately. Some of the drama standards and objectives have already been presented in the language arts curriculum. They are repeated here to identify them as drama standards and objectives as well. They are to be mastered once, not twice.

STANDARD 1

The students will use sensory and emotional awareness to express perceptions of the world. (Participant)

OBJECTIVES

1. Identify, interpret, and create imagery poetry or prose:
    a. Isolate the vocabulary that carries the sensory image.
    b. Interpret the author's meaning in a sensory passage of poetry or prose.
    c. Write a poem using sensory imagery.
2. Describe the emotional state of a character in a given selection of poetry or prose.

STANDARD 2

The students will develop interpersonal relationships. (Participant)

OBJECTIVES

1. Show respect for the ideas and comments of peers by listening attentively and by offering criticism in a positive way:
    a. Stress pros first.
    b. Give helpful suggestions second.

STANDARD 3

The students will continue to develop vocal and physical expression skills. (Participant)

OBJECTIVES

1. Listen and adjust to peers in choral speech exercises to achieve unity of pace, pitch, and inflection.
2. Synchronize body movements in a group pantomime of a poem or of a portion of a story.
3. Use hands expressively to convey weight, size, and shape while moving an imaginary object to a new location.
4. Memorize and recite a given literary selection:
    a. Demonstrate a good vocal range
    b. Speak with appropriate expression.

STANDARD 4

The students will continue to develop an understanding of dramatic structure. (Observer/Listener, Critic)

OBJECTIVES

1. Improvise a new ending or a new solution to a problem within a story or novel.

2. Analyze a character from a literary selection.
    a. Identify moods, behaviors, and motivations.
    b. Represent that character in a role-play of a scene.

STANDARD 5	The students will begin to analyze dramatic productions. (Observer/Listener, Critic)

OBJECTIVE

1. Identify what criteria should be used to evaluate the sets, plots, and acting in various television productions.

STANDARD 6	The students will design simple costumes for a dramatic production. (Participant, Critic)

OBJECTIVES

1. Design a costume for a character.

FIELD TRIAL

DRAMA COMPONENT

Level 8

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Drama	.0*	Mastery through Level 7

*No credit; integrated in Language Arts

PREFACE

The standards and objectives that follow should be integrated into the Level 8 Language Arts Curriculum, not taught separately. Some of the drama standards and objectives have already been presented in the language arts curriculum. They are repeated here to identify them as drama standards and objectives as well. They are to be mastered once, not twice.

STANDARD 1

The students will continue to use discover sensory and emotional awareness to express perceptions of the world. (Participant)

OBJECTIVES

1. Role play a character from a given poetry or prose selection.

STANDARD 2

The students will continue to develop interpersonal relationships. (Participant)

OBJECTIVES

1. Continue to show respect for the ideas and comments of peers by listening attentively and by offering criticisms in a positive way:
    a. Stress pros first.
    b. Give helpful suggestions second.
2. Establish work standards for rehearsal and presentation and abide by those standards.

STANDARD 3

The students will continue to develop vocal and physical expression skills. (Participant)

OBJECTIVES

1. Create and present a reader's theatre developed from prose or poetry.
2. Demonstrate varied vocal expressions and actions appropriate to a character.
3. Project a character in a radio drama.
4. Develop a pantomime expressing the meaning of a new vocabulary word.
5. Develop the dialogue between a reporter and the person being interviewed.

STANDARD 4

The students will continue to develop an understanding of dramatic structure. (Observer/Listener, Critic)

OBJECTIVES

1. Demonstrate knowledge of dramatic elements (i.e., plot, character, setting, climax, mood) by:
    a. Describing how a film or a stage production handles each element.
    b. Writing and recording a radio drama based on a narrative poem, story, historical event, or a portion of a novel.
3. Write a dramatic play.

STANDARD 5

The students will continue to analyze dramatic productions. (Observer/Listener, Critic)

OBJECTIVE

1. Explain why some criteria for evaluating the sets, plots, and acting in dramatic productions (stage, film, television) are more important than others.

STANDARD 6

The students will design sets for a dramatic production. (Participant, Critic)

OBJECTIVE

1. Design a set for one scene or a play using artwork or magazine pictures mounted on paper.

DRAMA COMPONENT

9 - 12

PREFACE

Levels 9-12 examine dramatic theories and establish the basics of role playing, pantomiming, oral interpretation, and characterization. Although the courses involve some performance, the students will develop the abilities to read a play critically and to understand dramatic techniques.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Beginning Theatre	.5	None

COURSE DESCRIPTION

This course introduces students to the history of theatre, fundamentals of theatrical performance (organization, skills, and techniques), and the study of drama (careful reading, viewing, and analysis of plays).

STANDARD 1

The students will continue to develop sensory and emotional awareness to express perceptions of the world. (Participant)

OBJECTIVES

1. Communicate simple emotions effectively.
    a. Communicate the dominant emotion of a brief dramatic passage.
    b. Identify the dominant emotions in selective scenes of a live performance, film, or television production.

STANDARD 2

The students will continue to develop interpersonal communication skills. (Participant)

OBJECTIVES

1. Perform successfully in solo or group activities without direct supervision.

2. Select material, as a group, for a dramatic production.

STANDARD 3

The students will continue to develop the vocal and physical expression skills. (Participant)

OBJECTIVES

1. Move naturally and with confidence in an assigned role (e.g., walk, run, turn, climb, and sit).

2. Mime a scene using imaginary objects, actions, and emotions, convincingly.

3. Memorize and recite a scripted speech, role, or scene.

STANDARD 4

The students will continue to develop an understanding of dramatic structure. (Observer/Listener, Critic)

OBJECTIVE

1. Evaluate the dramatic elements, i.e., plot, character, setting, climax, mood; and identify the protagonists and antagonists in a play they have read.

STANDARD 5

The students will begin to evaluate dramatic productions based on the criteria mastered at Level 8 (Standard 5). (Observer/Listener)

OBJECTIVE

1. Evaluate the acting and sets in a dramatic production on television.

STANDARD 6

The students will begin to identify and us the visual and technical aspects of play production. (Participant, Critic)

OBJECTIVES

1. Define and use basic stage terms (e.g., upstage, masking, and proscenium).

FIELD TRIAL

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Intermediate Theatre	.5	Beginning Theatre

COURSE DESCRIPTION

This course builds on the fundamentals mastered in Beginning Theatre.

STANDARD 1

The students will develop sensory and emotional awareness to express perceptions of the world. (Participant)

OBJECTIVES

1. Create an imaginary physical environment.
    a. Describe the visual, tactile, olfactory, aural, and gustatory elements.
2. Communicate convincingly the sensory elements from a written source, through verbal and physical improvisation.

STANDARD 2

The students will continue to develop interpersonal communication skills. (Participant)

OBJECTIVES

1. Lead a small group in a dramatic activity including giving clear instructions, specifying expectations, coaching, and evaluating.
2. Show an ability to work as a team member and accept the leadership of others..
3. Evaluate their own and their peers' performances.

STANDARD 3

The students will continue to develop vocal and physical expression skills. (Participant)

OBJECTIVES

1. Demonstrate voice control of rate, volume, and pitch.
2. Maintain a character throughout the attempted resolution of conflict in a given role.

STANDARD 4

The students will continue to develop an understanding of dramatic structure. (Observer/Listener, Critic)

OBJECTIVES

1. Evaluate the dramatic elements of plot, character, setting, climate, mood, protagonists, and antagonists in a play they have read.
2. Identify the exposition, rising and falling action, and denouement of a play they have read.

STANDARD 5

The students will continue to evaluate dramatic productions based on the criteria mastered in Level 8 (Standard 5). (Observer/Listener)

OBJECTIVES

1. Evaluate the acting, sets, lighting, and music of a dramatic performance on television, film, or stage.

STANDARD 6	The students will continue to identify and use the visual and technical aspects of play production. (Participant, Critic)

OBJECTIVE

1. Design the technical elements for a one act play.

FIELD TRIAL

DRAMA COMPONENT

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Advanced Theatre	1.0	Beginning Theatre

COURSE DESCRIPTION

This course gives students advanced training in the fundamentals mastered in the Beginning and Intermediate Theatre Courses. In addition, students will begin to develop proficiency in acting, directing, auditioning, and preparing resumes.

STANDARD 1

The students will continue to develop sensory and emotional awareness to express perceptions of the world. (Participant)

OBJECTIVES

1. Communicate the emotional life of a character effectively based on careful script analysis and understanding of the subtext.
2. Perform a wider range and variety of dramatic material with understanding and flexibility by:
    a. Selecting a character from a period play (same sex and age as performer) and present a short scene or monologue.
    b. Selecting a character for a contemporary play (same sex and age as performer) from a different social background than that of the performer.
3. Explain the process that can be used to assume a character prior to a specific performance.

STANDARD 2

The students will develop public performance skills. (Participant)

OBJECTIVES

1. Demonstrate the capacity for real ensemble acting by:
    a. Describing the elements the performer feels are essential to ensemble acting.
    b. Demonstrating these elements in short scenes with other performers.
2. Demonstrate the ability to work independently and to accept individual responsibility for the realization of the group's goal.
3. Critique in writing an individual's performance with positive suggestions for improvement.

STANDARD 3

The students will continue to develop vocal and physical expression skills. (Participant)

OBJECTIVES

1. Define and use correctly general vocal terms such as pace, pitch, volume, diaphragm, vowels, consonants, enunciation, dialect, accent, etc.
2. Control pitch, volume, and rate according to the rules of theatre articulation.
3. Create a complete characterization through vocal and physical expression.
4. Memorize and perform a speech or monologue from a period of dramatic literature.

STANDARD 4

The students will continue to develop an understanding of dramatic structure. (Observer/Listener, Critic)

OBJECTIVES

1. Compare and contrast plays of three different dramatic forms (i.e., tragedy, comedy, and absurdist).

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2. Write scenes according to principles of playwriting.

3. Demonstrate a basic understanding of theatre history through the study of play styles and periods.

STANDARD 5

The students will continue to evaluate dramatic productions based on the criteria mastered at Level 8 (Standard 5). (Observer/Listener, Critic)

OBJECTIVES

1. Read reviews in newspapers and periodicals of film, television, and theatre productions, to compare reports of the same events.

2. Write a valid critique of a performance, taking into consideration all aspects of performance and script, including direction.

STANDARD 6

The students will continue to identify and use the visual and technical aspects of play production. (Participant, Critic)

OBJECTIVES

1. Prepare a director's book and direct a scene or short play.

2. Demonstrate basic character creation through makeup and hair piece.

3. Demonstrate a knowledge of theatre management and administration (publicity, box office, house management, etc.) by developing group projects and/or participating in one or more of the areas.

MUSIC COMPONENT

K - 3

PREFACE

The music program in the primary grades is designed for students to develop their musical interests and potentials. Experiences will include singing songs, both by rote and through musical notation; listening to music, both recorded and live; playing simple classroom melodic and percussion instruments; creating simple melodies for singing or playing on classroom instruments; and moving expressively to music.

LEVEL K

STANDARD 1	The students will develop the vocal techniques and skills related to singing a variety of songs in a natural voice. (Participant)

OBJECTIVES

1. Sing with a voice that is natural and produced without strain.
2. Sing a variety of songs including action songs and singing games.
3. Sing simple tonal patterns in echo to the teacher.

STANDARD 2	The students will develop the techniques and skills related to playing simple percussion instruments. (Participant)

OBJECTIVES

1. Clap, march, or play simple percussion instruments to the beat of songs, chants or nursery rhymes.
2. Play simple percussion instruments and identify how sounds are produced on each one.

STANDARD 3

The students will develop the techniques and skills involved in identifying rhythm, melody, dynamics, form, and musical instruments. (Observer/Listener, Critic)

OBJECTIVES

1. Identify the beat in familiar songs.
2. Discriminate between loud-soft, fast-slow, long-short, and sound-silence.
3. Discriminate between high-low and up-down.
4. Identify when a melody moves up or down or stays the same.
5. Identify melodic or rhythmic phrases as being the same or different.
6. Identify classroom rhythm and melody instruments.

STANDARD 4

The students will identify music as a language. (Participant, Critic)

OBJECTIVES

1. Recognize that sounds can be represented by symbols.

STANDARD 5

The students will create simple movement and rhythmic patterns. (Participant, Observer/Listener)

OBJECTIVES

1. Express, through movement, the rhythms of nature, the movements of the animal kingdom, and the activities of their own special world.
2. Create simple rhythmic patterns using the voice or percussion instruments.

LEVEL 1

STANDARD 1

The students will develop the vocal techniques and skills related to singing a variety of songs in a comfortable range. (Participant)

OBJECTIVES

1. Sing with an awareness of pitch, using a voice that is natural and produced without strain within a comfortable range.
2. Sing a variety of songs which include action songs, folk songs, and singing games.
3. Sing tonal patterns in echo to the teacher.

STANDARD 2

The students will develop the techniques and skills related to playing simple percussion and melodic instruments. (Participant)

OBJECTIVES

1. Perform rhythmic patterns in 2's and 3's by clapping, stepping, or playing percussion instruments in echo to the teacher.
2. Play simple percussion and melodic instruments and identify how sounds are produced on each one.

STANDARD 3

The students will develop the techniques and skills involved in identifying rhythm, melody, dynamics, form, voices, and musical instruments. (Observer/Listener, Critic)

OBJECTIVES

1. Identify beats of 2's and 3's in familiar songs.
2. Discriminate between loud-soft, fast-slow, long-short, and sound-silence in a musical context.

3. Identify whether the melody stays the same, moves by steps, or skips.

4. Identify melodic or rhythmic phrases as being the same or different and recognize two-part (AB) form.

5. Identify violin, flute, trumpet, snare drum, bass drum, piano, guitar, and soprano and bass voices.

STANDARD 4	The students will identify and use some musical symbols and terms. (Participant, Critic)

OBJECTIVES

1. Identify and understand the music symbols, terms, and signs as used in Level 1 materials.

2. Transfer symbols into sounds.

STANDARD 5	The students will create simple movement, rhythmic, and melodic patterns. (Participant, Observer/Listener)

OBJECTIVES

1. Show through movement the mood (sad-happy), rhythm (even-uneven), melody (high-low), and tempo (fast-slow) of a simple piece of music.

2. Create simple rhythmic and melodic patterns using the voice or musical instruments.

LEVEL 2

STANDARD 1

The students will develop the vocal techniques and skills related to singing a variety of songs on pitch. (Participant)

OBJECTIVES

1. Sing on pitch, using a voice that is natural and produced without strain within a comfortable range.
2. Sing a variety of songs including folk, patriotic, and singing games.
3. Sing tonal patterns in echo to the teacher.

STANDARD 2

The students will develop the techniques and skills related to playing simple rhythmic and melodic instruments, sometimes to accompany musical selections. (Participant)

OBJECTIVES

1. Perform rhythmic patterns in 2's and 3's by clapping, stepping, or playing percussion instruments in echo to the teacher.
2. Play rhythmic and melodic instruments to accompany musical selections.

STANDARD 3

The students will develop the techniques and skills involved in identifying rhythm, melody, dynamics, form, mood, voices, and musical instruments. (Observer/Listener, Critic)

OBJECTIVES

1. Identify beat, accent, and meter in a variety of music.
2. Identify whether the melody stays the same, moves by steps, or skips.

3. Identify melodic or rhythmic phrases as being the same or different and recognize two-part (AB) and three-part (ABA) forms.

4. Describe how dynamics and tempo contribute to the mood of a piece.

5. Identify string bass, tuba, bassoon, cymbals, clarinet, and alto and tenor voices.

STANDARD 4

The students will identify musical symbols and terms and use simple tonal patterns. (Participant, Critic)

OBJECTIVES

1. Identify and understand the music symbols, terms, and signs as used in Level 2 materials.

2. Identify the notes in a simple tonal pattern using syllables and/or letter names.

STANDARD 5

The students will respond to music with appropriate body movements and create melodies. (Participant, Observer/Listener)

OBJECTIVES

1. Respond with appropriate body movements to melody, rhythm, phrasing, dynamics, and tempo.

2. Create melodies for nursery rhymes using the voice or musical instruments.

LEVEL 3

STANDARD 1

The students will develop the vocal techniques and skills related to singing a variety of songs including chants and two-part rounds. (Participant)

OBJECTIVES

1. Sing on pitch producing a pleasing tone, using correct posture and proper breathing habits.
2. Sing a variety of songs including folk, patriotic, seasonal, and singing games.
3. Sing chants to simple songs and two-part rounds.

STANDARD 2

The students will develop the techniques and skills related to playing a variety of rhythmic and melodic instruments. (Participant)

OBJECTIVES

1. Perform rhythmic patterns in 2/4 and 3/4 time on melody and percussion instruments.
2. Play a variety of classroom instruments including the tone bells.

STANDARD 3

The students will develop the techniques and skills involved in identifying rhythm, melody, dynamics, form, mood, and groups of musical instruments. (Observer/Listener, Critic)

OBJECTIVES

1. Recognize that music moves in 2's and 3's and learn the conducting patterns for 2/4 and 3/4 time.
2. Identify whether the melody moves up or down by half steps, whole steps, or skips.

3. Identify the following musical forms: two-part (AB) and three-part (ABA, ABC).

4. Identify mood, tempo, and dynamics while listening to various types of music.

5. Classify orchestral instruments into groups of strings, woodwinds, brass, and percussion and identify cello, oboe, and French horn.

STANDARD 4	The students will identify musical language including sound/symbol relationships in simple melodies. (Participant, Critic)

OBJECTIVES

1. Identify and understand the music symbols, terms, and signs as used in Level 3 materials.

2. Identify the notes of a simple melody, using syllables and/or letter names.

STANDARD 5	The students will respond to music with appropriate body movements, as well as create melodies and accompaniments. (Participant, Observer/Listener)

OBJECTIVES

1. Respond to beat, accent, rhythm, pattern, and changing meters through movement and dance.

2. Create melodies and accompaniments using the voice or musical instruments.

MUSIC COMPONENT

4 - 6

PREFACE

The music program in the intermediate grades is designed for students to develop their musical interests, potentials, and aesthetic judgments. Experiences will include singing a variety of songs, listening to music, reading simple melodies through musical notation, playing a variety of classroom melodic and percussion instruments, and responding expressively to music through movement.

LEVEL 4

STANDARD 1	The students will develop the vocal techniques and skills related to singing a variety of songs with expression. (Participant)

OBJECTIVES

1. Sing songs accurately with a relaxed, natural tone using correct posture and proper breathing habits.
2. Sing a variety of songs including folk, patriotic, Utah, and singing games.
3. Sing melodies, rounds, chants, ostinatos, descants, and partner songs.
4. Sing with expression through the use of proper dynamics, and tempo.

STANDARD 2	The students will develop the techniques and skills related to playing a variety of rhythmic and melodic instruments emphasizing rhythmic patterns. (Participant)

OBJECTIVES

1. Perform rhythm patterns in 2/4, 3/4, and 4/4 time on melody and/or percussion instruments.

2. Play a variety of classroom instruments including recorders, autoharps, and tone bells.

STANDARD 3	The students will develop the techniques and skills involved in identifying rhythm, melody, dynamics, form, mood, and orchestral instruments, as well as conducting simple meters. (Observer/Listener, Critic)

OBJECTIVES

1. Conduct the following meters: 2/4, 3/4, and 4/4 time.
2. Identify meter, mood, tempo, form, and dynamics while listening to various types of music.
3. Identify the common orchestral instruments by sight and sound.
4. Identify musical forms such as two-part (AB), three-part (ABA, ABC), and rondo (ABACAD, etc.).

STANDARD 4	The students will read musical language, particularly sound/symbol relationships and simple melodies. (Participant, Critic)

OBJECTIVES

1. Identify musical symbols, terms, and signs in Level 4 materials.
2. Read the notes of a simple melody using syllables and/or letter names.

STANDARD 5	The students will respond to music artistically, as well as use repetition and contrast when creating melodies and accompaniments. (Participant, Observer/Listener)

OBJECTIVE

1. Respond to music through activities such as movement and dance.
2. Use repetition and contrast in creating melodies and accompaniments on a variety of instruments.

LEVEL 5

STANDARD 1

The students will develop the vocal techniques and skills related to singing a variety of songs with expression, particularly "part" songs. (Participant)

OBJECTIVES

1. Sing songs accurately with a natural tone, using correct posture and proper breathing habits.
2. Sing a variety of songs from the Americas, folk songs, spirituals, patriotic songs, and singing games.
3. Sing melodies, rounds, canons, and two-part songs.
4. Sing with expression through the use of proper dynamics, tempo, and style.

STANDARD 2

The students will develop the techniques and skills related to playing a variety of rhythmic and melodic instruments emphasizing more complex rhythmic patterns. (Participant)

OBJECTIVES

1. Perform increasingly complex rhythmic patterns in a variety of simple meters: 2/4, 3/4/, 4/4, and 6/8.
2. Play a variety of instruments such as the recorder, ukulele, autoharp, guitar, percussion, etc.

STANDARD 3

The students will develop the techniques and skills involved in identifying musical elements and performing groups, as well as conducting more difficult rhythm patterns. Observer/Listener, Critic)

OBJECTIVES

1. Conduct the following meters: 2/2 (¢), 2/4, 3/4, 4/4 (C), and 6/8.

2. Identify meter, mood, style, tempo, form, and dynamics while listening to various types of music.
3. Identify an orchestra, band, and choir by sight and sound.
4. Understand musical forms such as two-part (AB), three-part (ABA, ABC), and rondo (ABACAD, etc.).

STANDARD 4

The students will read melodies.
(Participant, Critic)

OBJECTIVES

1. Identify musical symbols, terms, and signs in Level 5 materials.
2. Read the notes of a melody using syllables and/or letter names.

STANDARD 5

The students will respond to music artistically, as well as create melodies and accompaniments.
(Participant, Observer/Listener)

OBJECTIVE

1. Respond to music through activities such as movement, dance, and pantomime.
2. Create melodies with accompaniments for a variety of voices or instruments.

LEVEL 6

STANDARD 1

The students will develop the vocal techniques and skills related to singing a variety of songs including three-part songs. (Participant)

OBJECTIVES

1. Sing songs accurately with a natural tone using correct posture and proper breathing habits.
2. Sing a variety of songs from the United States, other countries, songs with foreign language texts, hymns, and spirituals.
3. Sing one part, while others are singing contrasting parts, in two- and three-part songs.
4. Sing with expression through the use of proper dynamics, tempo, and style.

STANDARD 2

The students will develop the techniques and skills related to playing a variety of rhythmic and melodic instruments with more complex rhythmic patterns. (Participant)

OBJECTIVES

1. Perform increasingly complex rhythmic patterns in a variety of meters: 2/4, 2/2 (¢), 4/4 (C), 3/4, 3/8, and 6/8.
2. Play a variety of instruments such as the recorder, ukulele, autoharp, guitar, percussion, etc.

STANDARD 3

The students will identify musical elements and performance groups, as well as conduct more complex meters. (Observer/Listener, Critic)

OBJECTIVES

1. Conduct the following meters: 2/4, 2/2 (₵), 4/4 (C), 3/4, 3/8, and 6/8.
2. Identify meter, mood, style, tempo, form, and dynamics while listening to various types of music.
3. Identify the common instrumental and vocal ensembles by sight and sound.
4. Understand musical forms such as two-part (AB), three-part (ABA, ABC), rondo (ABACAD, etc.), and theme and variations.

STANDARD 4

The students will sight-read simple melodies. (Participant, Critic)

OBJECTIVES

1. Identify and define the musical symbols, terms, and signs as used in Level 6 materials.
2. Read melodies using syllables and/or letter names.

STANDARD 5

The students will respond to music artistically and create compositions. (Participant, Observer/Listener)

OBJECTIVE

1. Respond to music throuch activities such as movement, dance, pantomime, and dramatization.
2. Create accompaniments and words to a melody.

MUSIC COMPONENT

7 - 8

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
General Music (Core Option)	.5	None

COURSE DESCRIPTION

Students in this class will be introduced to the world of music through a variety of experiences including listening, performing, creating, and analyzing music. This class will include an introduction to career opportunities in music.

STANDARD 1	The students will reinforce and expand vocal techniques and skills related to singing, including a major scale and harmonies. (Participant)

OBJECTIVES

1. Produce an acceptable vocal tone by using proper posture, breath support, and diction.
2. Recognize when the voice is in tune with other voices.
3. Write and sing a major scale.
4. Sing unison, two-part, and three-part harmony.
5. Sing with expression using proper dynamics, tempo, and style.
6. Understand and show tolerance for the changing voice.

STANDARD 2	The students will develop and reinforce the necessary techniques and skills related to playing musical instruments as accompaniments for songs. (Participant)

OBJECTIVE

1. Play instruments such as the ukulele, guitar, autoharp, recorder, and percussion instruments as accompaniments for songs.

STANDARD 3

The students will identify musical instruments, voices, and historical periods; understand musical forms; and expand conducting skills. (Observer/Listener, Critic)

OBJECTIVES

1. Identify band, orchestra, and electronic instruments by sight and sound and recognize the characteristic qualities of the soprano, alto, tenor, and bass voices.
2. Identify the important historical periods of music.
3. Conduct the following meters: 4/4 (C), 3/4, 2/4, 3/8, 6/8, and 2/2 (₵).
4. Understand musical forms such as two-part (AB), three-part (ABA, ABC), rondo (ABACAD, etc.), fugue, and theme and variations.

STANDARD 4

The students will sight read simple rhythmic patterns and melodies using simple notes and rests. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Interpret musical symbols, terms, and signs as used in class.
2. Read melodies using letter names and/or syllables.
3. Sight-read simple rhythmic patterns in single-pitch exercises and melodies, using whole, half, quarter notes and corresponding rests in quarter note time signatures.

STANDARD 5

The students will create and notate a composition. (Participant)

OBJECTIVE

1. Create and notate a simple melody.

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STANDARD 6

The students will evaluate personal preferences of music. (Observer/Listener, Critic)

OBJECTIVE

1. Describe why certain experiences, activities, or musical examples are preferred to others.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Beginning Chorus (Core Option)	1.0	None

COURSE DESCRIPTION

This class emphasizes vocal training for students who have soprano, alto, tenor, or bass voices. Students will learn to sing accurately by reading music notation. They will produce acceptable tones using proper diction and respond to the interpretations of the music.

STANDARD 1

The students will reinforce and expand knowledge, techniques, and skills involved in singing, including the vocal mechanism, major and chromatic scales, and the relationship of the individual voice to the entire ensemble. (Participant)

OBJECTIVES

1. Produce an acceptable vocal tone by using proper posture, breath support, and diction.
2. Match pitches, sing intervals and melodic lines in tune.
3. Understand the vocal mechanism and its function.
4. Produce a gradual extension of range with increasing facility and flexibility.
5. Understand the relationship of individual voices to the rest of the ensemble, e.g., balance, blend, and timbre.
6. Write and sing a major scale and a chromatic scale one octave.
7. Sing with expression using proper dynamics, tempo, and style.
8. Sing unison, two-part, and three-part harmony.
9. Understand and show tolerance for the changing voice.
10. Sing in a small ensemble.

STANDARD 2

The students will identify performance problems and historical backgrounds, understand musical forms, and expand conducting skills. (Observer/Listener, Critic)

OBJECTIVES

1. Analyze performance problems and take appropriate measures to resolve them.
2. Identify the historical background of music being performed.
3. Conduct the following meters: 4/4 (C), 3/4, 2/4, 3/8, 6/8, and 2/2 (¢).
4. Understand musical forms such as: two-part (AB), three-part (ABA, ABC), rondo, (ABACAD, etc.), theme and variations, and fugue.

STANDARD 3

The students will sight-read simple rhythmic patterns and melodies using simple notes and rests. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Interpret symbols, terms, and signs used in choral literature.
2. Sight-read simple rhythmic patterns in single-pitch exercises and melodies using whole, half, quarter notes, and corresponding rests in quarter note time signatures.

STANDARD 4

The students will create and note a composition. (Participant)

OBJECTIVE

1. Create and notate a simple melody.

STANDARD 5	The students will evaluate personal preferences of music. (Observer/Listener, Critic)

OBJECTIVE

1. Describe why certain experiences, activities, or musical examples are preferred to others.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Beginning Band (Core Option)	1.0	None

COURSE DESCRIPTION

This course provides an opportunities for students to develop their musical potential and aesthetic understanding through learning to play a woodwind, brass, or percussion instrument. Emphasis will be placed on playing position, basic tone production, rhythmic precision, interpretation of musical symbols, and care of an instrument.

STANDARD 1

The students will develop and reinforce the techniques and skills related to playing a musical instrument, including playing position, tone production, scales, rudiments and expression. (Participant)

OBJECTIVES

1. Identify the parts of the instrument.
2. Demonstrate proper embrouchure for wind instruments or stick grip for percussion instruments.
3. Demonstrate appropriate posture and hand position for playing the instrument.
4. Demonstrate proper breath support for wind instruments.
5. Produce an acceptable tone.
6. Articulate legato and staccato on wind instruments.
7. Play the following snare drum rudiments: single stroke roll, long roll, flam, and ruff. (Percussionists)
8. Write and play the following major scales: one octave (concert pitch) F, B^b, E^b, A^b. (including percussionists.)
9. Perform dynamic levels for piano and forte.

STANDARD 2

The students will identify intonation problems and musical elements, understand musical forms, and expand conducting skills. (Observer/Listener, Critic)

OBJECTIVES

1. Recognize and correct intonation problems at the unison.
2. Conduct the following meters: 2/4, 2/2 (¢), 4/4 (C), 3/4, 3/8, and 6/8.
3. Identify the following musical forms: two-part (AB), three-part (ABA, ABC), rondo (ABACAD, etc.), and theme and variations.
4. Identify meter, mood, style, tempo, form, and dynamics while listening to the music being performed.

STANDARD 3

The students will sight-read simple rhythmic patterns and melodies using simple notes and rests. (Participant, Listener/Observer, Critic)

OBJECTIVES

1. Interpret the musical symbols, terms, and signs as found in first year method books.
2. Sight-read simple rhythmic patterns in single-pitch exercises and melodies using whole, half, quarter notes, and corresponding rests in quarter note time signatures.

STANDARD 4

The students will create a musical composition. (Participant)

OBJECTIVES

1. Play simple tunes by ear.

STANDARD 5

The students will evaluate personal preferences of music. (Observer/Listener, Critic)

OBJECTIVES

1. Describe why certain experiences, activities, or musical examples are preferred to others.

7 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Beginning Orchestra (Core Option)	1.0	None

COURSE DESCRIPTION

This course provides meaningful experiences in music by teaching the students to play orchestra string instruments. Emphasis will be placed on playing position, basic tone production, rhythmic precision, interpretation of music symbols, bowing techniques, and care of the instrument.

STANDARD 1

The students will develop and reinforce the techniques and skills related to playing a musical instrument, including playing position, tone production, and expression. (Participant)

OBJECTIVES

1. Identify the parts of the instrument and bow.
2. Demonstrate the correct playing position for the body, instrument, and bow.
3. Perform with clear tone quality.
4. Play the following bowing techniques:
    a. Detache (smooth, separate bows) using half bows and introducing the use of whole bows.
    b. Staccato (short strokes) using half bows.
    c. Legato (slurring) using two or three notes per bow.
5. Play the basic finger patterns for half and whole steps used in major and minor tetrachords (four-note scales).
6. Write and play the finger patterns for the following one octave major scales:
    a. Violin - D, G, A.
    b. Viola and cello - D, G, C.
    C. Bass - D, G.
7. Play the dynamic levels for piano and forte.

8. Play pizzicato.

STANDARD 2

The students will identify intonation problems and musical elements, understand musical forms, and expand conducting skills. (Observer/Listener, Critic)

OBJECTIVES

1. Recognize and correct intonation problems.
2. Pluck a string and tune it to a given pitch.
3. Understand musical forms such as: two-part (AB), three-part (ABA, ABC), rondo (ABACAD, etc.), and theme and variations.
4. Identify the meter, mood, style, tempo, form, and dynamics while listening to the music being performed.
5. Conduct the following meters: 2/4, 3/4, 4/4 (C), 2/2 (¢), 3/8, and 6/8.

STANDARD 3

The students will sight-read simple rhythmic patterns and melodies using simple notes and rests. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Sight-read simple rhythmic patterns in single-pitch exercises and melodies with whole, half, quarter notes, and corresponding rests in 2/4, 3/4, and 4/4 time signatures.
2. Read and play one's own part in an ensemble.
3. Interpret musical symbols, terms, and signs as found in beginning method books.

STANDARD 4

The students will create a musical composition. (Participant)

OBJECTIVES

1. Play simple tunes by ear.

STANDARD 5

The students will evaluate personal preferences of music. (Observer/Listener, Critic)

OBJECTIVES

1. Describe why certain experiences, activities, or musical examples are preferred to others.

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Intermediate Chorus (Core Option)	1.0	None

COURSE DESCRIPTION

This course is open to all students. Primary consideration will be given to vocal production, ear training, and music fundamentals. Special attention will be given to increasing the ability to read music and to understand music of many choral composers. Two-, three-, and four-part music will be performed at concerts.

STANDARD 1	The students will reinforce and expand the techniques and skills related to singing, including melodic and harmonic intervals, melodic lines, and a minor scale. (Participant)

OBJECTIVES

1. Match pitches, sing melodic intervals, harmonic intervals, and melodic lines in tune.
2. Produce a good vocal tone using proper breath support, posture, and diction.
3. Sing two-, three-, and four-part harmony.
4. Sing with expression, using proper dynamics, tempo, and style.
5. Understand the basic parts of the vocal mechanism and their function.
6. Write and sing a major, minor, and chromatic scale one octave.
7. Understand the relationship of individual voices to the entire ensemble, e.g., balance, blend, timbre.
8. Produce a gradual extension of range with increasing facility and flexibility.
9. Sing a solo and/or sing in a small ensemble.

STANDARD 2

The students will analyze performance problems, identify historical backgrounds, understand musical forms and chord structures, and expand conducting skills.
(Observer/Listener, Critic)

OBJECTIVES

1. Analyze performance problems and take appropriate measures to resolve them.
2. Identify the historical background of the music being performed.
3. Understand the basic musical form of the selections being performed.
4. Understand the basic structure of chords and its relationship to the music being performed.
5. Conduct patterns for commonly used time signatures.

STANDARD 3

The students will sight-read rhythmic and melodic patterns using whole, half, quarter, and eighth notes and rests. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Interpret symbols, terms, and signs as used in choral literature.
2. Sight-read rhythmic patterns in single pitch exercises and melodies using whole, half, quarter, and eighth notes and corresponding rests in quarter note time signatures.

STANDARD 4

The students will create and notate a composition.
(Participant)

OBJECTIVES

1. Compose and notate a composition that includes melody and rhythm.

STANDARD 5

The students will explain how music has influenced society. (Observer/Listener, Critic)

OBJECTIVES

1. Describe ways various types of music have influenced our society, i.e., jazz, rock, folk, country western, and classical.

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Advanced Chorus (Core Option)	1.0	Intermediate Chorus

COURSE DESCRIPTION

This course is for students who have the desire and ability to sing in advanced vocal performing groups. Vocal production and ear training skills will be improved through rehearsals and performances. Attention will be given to improving music reading ability and the understanding of mood, form, and style in choral music.

STANDARD 1	The students will reinforce and expand the techniques and skills related to singing. (Participant)

OBJECTIVES

1. Match pitches, sing melody intervals, harmonic intervals, and melodic lines in tune.
2. Produce a quality vocal tone using proper breath support, posture, and diction.
3. Sing two-, three-, and four-part harmony.
4. Understand the basic parts of the vocal mechanism and their function.
5. Write and sing major, minor, and chromatic scales one octave.
6. Understand the relationship of individual voices to the entire ensemble, e.g., balance, blend, timbre.
7. Produce a gradual extension of range with increasing facility and flexibility.
8. Sing a solo and/or sing in a small ensemble.
9. Harmonize melodies by ear in two, three, and four parts.

STANDARD 2

The students will analyze performance problems, describe historical and stylistic backgrounds, explain musical forms, understand chord structures, and expand conducting skills. (Observer/Listener, Critic)

OBJECTIVES

1. Analyze performance problems and take appropriate measures to resolve them.
2. Describe the historical and stylistic background of the music being performed.
3. Explain the basic musical form of the selections being performed.
4. Understand the structure of chords and its relationship to the music being performed.
5. Conduct patterns for commonly used time signatures.

STANDARD 3

The students will sight-read rhythmic and melodic patterns using whole, half, quarter, eighth, and sixteenth notes and rests. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Interpret symbols, terms, and signs used in choral literature.
2. Sight-read rhythmic patterns in single pitch exercises and melodies using whole, half, quarter, eighth, sixteenth notes and rests.

STANDARD 4

The students will create and notate a composition. (Participant)

OBJECTIVES

1. Compose and notate a composition that includes melody, rhythm, and harmony.

STANDARD 5

The students will evaluate a musical performance. (Observer/Listener, Critic)

OBJECTIVES

1. Write a critique of a musical performance taking into consideration tone quality, intonation, rhythm, balance/blend, technique, interpretation, and stage presentation.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Music Appreciation (Core Option)	.5	None

COURSE DESCRIPTION

This course gives students an opportunity to explore, to appreciate, and to enjoy music. Activities include listening to various types and styles of music; identifying the elements of music as they appear in musical notation; and evaluating different products such as recordings, tape decks, etc., for personal use.

STANDARD 1

The students will identify the elements and styles of music and the characteristics of instruments and voices. (Observer/Listener, Critic)

OBJECTIVES

1. Identify the basic characteristics of rhythm, e.g., pulse, meter, and pattern.
2. Understand the various properties of sound, e.g., pitch, duration, and timbre.
3. Identify the basic characteristics of melody, e.g., register, contour, and point of climax.
4. Understand the harmonic, rhythmic, melodic, and structural characteristics of various types and styles of music such as rock, folk, jazz, oratorio, electronic, mass, symphonic, opera, and avant garde.
5. Recognize that harmony consists of two or more pitches that produce tension and release, dissonance and consonance.
6. Identify the unique characteristics of individual instruments and voices and understand their function in an ensemble.
7. Recognize the historical background of various types and styles of music.
8. Identify such elements as contrast, balance, unity, variety, and repetition in musical form.

STANDARD 2

The students will evaluate various types of music, recordings, and electronic equipment and identify skills used in a music career. (Observer/Listener, Critic)

OBJECTIVES

1. Recognize ways various types of music have influenced our society, e.g., jazz, rock, folk, country, and classical.
2. Describe why certain musical experiences and activities are preferred to others.
3. Identify the skills necessary for a musical career.
4. Evaluate various products such as electronic equipment, recordings, tape decks, etc., for personal use.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Music Theory (Core Option)	1	None

COURSE DESCRIPTION

This course consists of ear training, part writing, keyboarding, sight singing, and arranging for band, orchestra, and choir. Music theory provides the necessary background for students who plan to continue with music at the college level,

STANDARD 1

The students will develop and reinforce the techniques and skills related to playing a musical instrument, including chord accompaniments and progressions. (Participant)

OBJECTIVES

1. Play chord accompaniments to familiar songs on a harmony producing instrument.
2. Play simple chord progressions on the piano with good voice leading.

STANDARD 2

The students will identify intervals and musical forms and write simple dictation. (Observer/Listener, Critic)

OBJECTIVES

1. Recognize by ear and by sight all intervals within the octave.
2. Write simple rhythmic, melodic, and harmonic dictation.
3. Understand the basic musical forms, e.g., two-part (AB), three-part (ABA, ABC), rondo (ABACAD, etc.), fugue, and theme and variations.

STANDARD 3

The students will identify and use the techniques and skills in sight-reading music, including notation, scale structure, chord structure, and transposition. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Read simple melodies in treble and bass clef.
2. Notate pitch and rhythm in accordance with standard notational practices.
3. Write, sing, and play all major scales and the three forms of the minor scale.
4. Sing and play major and minor triads and V_7 arpeggions with pitch names or numbers.
5. Analyze the chords in a simple composition by letter, name, and number.
6. Transpose a composition from one key to another.

STANDARD 4

The students will create and notate a composition. (Participant)

OBJECTIVES

1. Compose and notate a composition which includes melody, rhythm, and harmony.
2. Harmonize a melody with appropriate chords using good voice leading.

STANDARD 5

The students will evaluate a musical performance. (Observer/ Listener, Critic)

OBJECTIVES

1. Write a critique of a musical performance taking into consideration tone quality, intonation, rhythm, balance, blend, technique, interpretation, and stage presentation.

7 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Intermediate Band (Core Option)	1.0	Beginning Band

COURSE DESCRIPTION

This course expands and reinforces beginning level core concepts and develops consumer and career awareness. Emphasis will be placed on tone quality, familiarity with basic keys and scales, performance of the basic articulations, recognition of different styles, and musical expression.

STANDARD 1

The students will develop and reinforce the techniques and skills related to playing a musical instrument, including tone production, articulation, scales, rudiments, and relationship of the individual to the ensemble. (Participant)

OBJECTIVES

1. Produce a tone which reflects the appropriate quality of the specific instrument.
2. Articulate legato, staccato, marcato, accented, and slurred passages on wind instruments.
3. Play the following snare drum rudiments: single-stroke roll, long roll, flam, ruff, flam tap, flam accent, five-stroke roll, seven-stroke roll, nine-stroke roll, flamacue, and paradiddle. (Percussionists)
4. Demonstrate basic technique on timpani, mallet instruments, and accessory percussion instruments. (Percussionists)
5. Write and play the following scales (concert pitch) for wind and mallet percussion instruments:
   a. C, F, B^b, E^b, A^b, and D^b major scales (one octave).
   b. D, G, C, and F natural minor scales (one octave).
   c. The chromatic scale throughout each individual's range.
6. Understand the relationship of individual instruments to the rest of the ensemble, e.g., balance, blend, and timbre.
7. Perform dynamic levels from piano through forte.
8. Perform a solo and/or play in a small ensemble.

STANDARD 2

The students will analyze performance problems, identify historical backgrounds and musical forms, and expand conducting patterns. (Observer/Listener, Critic)

OBJECTIVES

1. Recognize and correct intonation problems in 3rds, 5ths, and octaves.
2. Identify the following musical forms: two-part (AB), three-part (ABA, ABC), rondo (ABACAD etc.), theme and variations, and fugue.
3. Identify the historical background of the music being performed.
4. Analyze performance problems and take appropriate measures to resolve them.
5. Conduct the following meters: 2/4, 2/2 (¢), 4/4 (C), 3/4, 3/8, and 6/8.

STANDARD 3

The students will sight-read rhythmic and melodic patterns using whole, half, quarter, and eighth notes and rests. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Interpret musical symbols, terms, and signs used in intermediate method books.

3. Sight-read rhythmic patterns in single-pitch exercises and melodies using whole, half, quarter, and eighth notes and the equivalent rests in all simple meters, alla breve, and compound 6/8.

STANDARD 4

The students will create and notate compositions. (Participant)

OBJECTIVES

1. Improvise simple melodies.
2. Compose and notate a composition that includes melody and rhythm.

STANDARD 5	The students will explain how music has influenced society. (Observer/Listener, Critic)

OBJECTIVES

1. Describe ways various types of music have influenced our society, e.g., jazz, rock, folk, country western, and classical.

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Advanced Band (Core Option)	1.0	Intermediate Band

COURSE DESCRIPTION

This course provides opportunities for advancement and refinement of musical potential, higher level thinking skills, and aesthetic judgment and nurtures music appreciation. Emphasis will be placed on ensemble performance skills, recognition of musical styles and historical periods, the study of literature for band, chamber ensemble performance, and creative development.

STANDARD 1

The students will develop and reinforce the techniques and skills related to playing a musical instrument, including performance dynamic levels. (Participant)

OBJECTIVES

1. Produce a refined tone which reflects the appropriate quality of the specific instrument.
2. Articulate combinations of legato, staccato, marcato, accented, and slurred passages, using advanced tonguing techniques where appropriate on wind instruments.
3. Play the following snare drum rudiments: single-stroke roll, long roll, flam, ruff, flam tap, flam accent, five-stroke roll, seven-stroke roll, nine-stroke roll, flamacue, paradiddle, flam paradiddle, drag paradiddle, single ratamcue, and single drag. (Percussionists)
4. Demonstrate technique on timpani, mallet instruments, and accessory percussion instruments. (Percussionists)
5. Write and play the following scales (concert pitch) for wind and mallet percussion instruments:
    a. The 12 major scales (one octave).
    b. Four minor scales: G, C, F, and D minor scales in three forms: harmonic, melodic, and natural (one octave).
    c. The chromatic scale throughout each individual's range.

6. Perform and explain the relationship of individual instruments to the rest of the ensemble, e.g., balance, blend, timbre.
7. Perform dynamic levels from pianissimo through fortissimo.
8. Perform a solo of at least medium difficulty and/or play in a small ensemble.

STANDARD 2

The students will analyze performance problems, describe historical and stylistic backgrounds, explain musical forms, and expand conducting skills. (Observer/Listener, Critic)

OBJECTIVES

1. Tune all melodic and harmonic intervals.
2. Explain the musical forms of the selections being performed.
3. Describe the historical and stylistic background of the music being performed.
4. Analyze performance problems and take appropriate measures to resolve them.
5. Conduct patterns for commonly used time signatures.

STANDARD 3

The students will sight-read rhythmic and melodic patterns using simple and compound time signatures. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Interpret musical symbols, terms, and signs used in band literature.
2. Sight-read rhythmic patterns in single-pitch exercises and melodies using all commonly used simple and compound time signatures.

STANDARD 4	The students will create and notate a composition. (Participant)

OBJECTIVES

1. Improvise complex melodies.
2. Compose and notate a composition that includes melody, rhythm, and harmony.

STANDARD 5	The students will evaluate a musical performance. (Observer/Listener, Critic)

OBJECTIVES

1. Write a critique of a musical performance taking into consideration the tone quality, intonation, rhythm, balance, blend, technique, interpretation, and stage presentation.

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Intermediate Orchestra (Core (Option)	1.0	Beginning Orchestra

COURSE DESCRIPTION

This course reinforces and expands beginning level core concepts and develops consumer and career awareness. Emphasis will be placed on developing bowing techniques, finger patterns, musical notation, and interpretation of musical terms and signs.

STANDARD 1	The students will develop and reinforce the techniques and skills related to playing a musical instrument including tone quality, major scales, and dynamic levels. (Participant)

OBJECTIVES

1. Perform with clear tone quality.
2. Play the following bowing techniques:
   a. Detache (smooth, separate bows) using half and whole bows.
   b. Staccato (short strokes) using full bows and two, three, and four notes per bow.
   c. Legato (slurring) using four notes per bow.
3. Play music in the keys of A, D, G, C, F, and B^b using appropriate half- and whole-step finger patterns.
4. Write and play the following scales:
   a. Violin--two octaves - A, D, G, C, B^b, E^b.
   b. Viola--two octaves - A, D, G, C, F, E^b.
   c. Cello--two octaves - D, G, C, F, E^b.
   d. Bass--one octave - A, D, G, C, F, B^b, E^b.
5. Play the following dynamics: crescendo and decrescendo (dimuendo), mezzo piano and mezzo forte, fortissimo and pianissimo, and accents.

6. Play in the following positions:
    a. Violin and viola--1st and 3rd.
    b. Cello--1st and 4th.
    c. Bass--1/2, 1st, 2nd, 3rd, and 4th positions.
7. Play a slow vibrato motion.
8. Understand the relationship of individual instruments to the rest of the ensemble, e.g., balance, blend, and timbre.
9. Perform in a small ensemble.

STANDARD 2

The students will analyze performance problems, understand musical forms, identify historical backgrounds, and expand conducting skills. (Observer/Listener, Critic)

OBJECTIVES

1. Play in tune.
2. Tune the instrument with bow to a given pitch for each string.
3. Understand musical forms such as: two-part (AB), three-part (ABA, ABC), rondo (ABACAD, etc.), theme and variations, canon, and fugue.
4. Identify the historical background of the music being performed.
5. Analyze performance problems and take appropriate measures to resolve them.
6. Conduct the following meters: 4/4 (C), 3/4, 2/4, 3/8, 6/8, and 2/2 (¢).

STANDARD 3

The students will sight-read rhythmic patterns and melodies. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Sight-read rhythmic patterns and melodies with whole notes through eighth notes including dotted half and dotted quarter notes.

2. Interpret musical symbols, terms, and signs as found in intermediate method books.

STANDARD 4	The students will create and notate compositions. (Participant)

OBJECTIVES

1. Improvise on simple melodies.
2. Create and notate a composition that includes melody and rhythm.

STANDARD 5	The students will explain how music has influenced society. (Observer/Listener, Critic)

OBJECTIVES

1. Describe ways various types of music have influenced our society, e.g., jazz, rock, folk, country western, and classical.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Advanced Orchestra (Core Option)	1.0	Intermediate Orchestra

COURSE DESCRIPTION

This course advances and expands core concepts and encourages higher level thinking skills. Students will develop proficiency in playing string instruments. Emphasis will be placed on playing techniques, orchestral literature, style, performance, creativity, and appreciation of music.

STANDARD 1

The students will develop and reinforce the techniques and skills related to playing a musical instrument including minor scales. (Participant)

OBJECTIVES

1. Perform with a clear tone quality.
2. Play the following bowing techniques:
    a. Slurring staccato (short strokes) using six to eight notes per bow.
    b. Legato (slurring) using eight notes per bow.
    c. Spiccato (bounced bows).
    d. Speciality orchestral bowing (e.g., tremolo, col legno).
3. Play music in the keys of E, A, D, G, C, F, B^b, E^b, and A^b using appropriate half- and whole-step fingering patterns.
4. Write and play the following major and melodic minor scales:
    a. Violin--three octaves - G, A, B^b.
    b. Viola--three octaves - C, D, E^b.
    c. Cello--three octaves - E, F, G.
    d. Bass--two octaves - E, F, G.
5. Play dynamic levels from pianissimo through fortissimo, including changing dynamics and accents.

6. Play in the following positions:
   a. Violin and viola--1st, 3rd, and 5th positions.
   b. Cello--1st, 2nd, 3rd, and 4th positions.
   c. Bass--1/2, 1st, 2nd, 3rd, 4th, 5th, 6th, and 7th positions.
7. Demonstrate the ability to play vibrato.
8. Perform and explain the relationship of individual instruments to the rest of the ensemble, e.g., balance, blend, and timbre.
9. Perform a solo and/or play in a small ensemble.

STANDARD 2

The students will analyze performance problems, explain musical forms, describe historical and stylistic backgrounds, and expand conducting skills. (Observer/Listener, Critic)

OBJECTIVES

1. Play in tune.
2. Tune the violin, viola, or cello by fifths or the string bass by harmonics to A = 440.
3. Explain the musical forms of the selections being performed.
4. Describe the historical and stylistic background of the music being performed.
5. Analyze performance problems and take appropriate measures to resolve them.
6. Conduct patterns for commonly used time signatures.

STANDARD 3

The students will sight-read rhythmic patterns and melodies. (Participant, Observer/Listener, Critic)

OBJECTIVES

1. Sight-read rhythmic patterns and melodies with whole notes through sixteenth notes, including dotted notes and triplets.

2. Interpret musical symbols, terms, and signs found in advanced methods books.

STANDARD 4	The students will create and notate compositions. (Participant)

OBJECTIVES

1. Improvise more complex melodies.
2. Compose and notate a composition that includes melody, rhythm, and harmony.

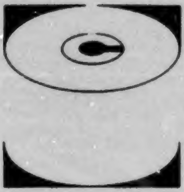
STANDARD 5	The students will evaluate a musical performance. (Observer/Listener, Critic)

OBJECTIVES

1. Write a critique of a musical performance taking into consideration tone quality, intonation, rhythm, balance/blend, technique, interpretation, and stage presentation.

Section F

INFORMATION TECHNOLOGY EDUCATION



CORE CURRICULUM FOR INFORMATION TECHNOLOGY STUDIES

GENERAL

This document represents the core standards and objectives for the information technology studies curriculum approved by the Utah State Board of Education. These standards represent only the core, not the complete curriculum. It is intended that local districts build upon these core standards and establish a full curriculum representing information technology studies.

There are three general areas of standards: AWARENESS, UTILIZATION and SPECIALIZATION. The Utah State Board of Education required these three general areas for high school graduation beginning September, 1988. The AWARENESS area represents the elementary standards, K-6. UTILIZATION represents the middle-junior high school standards, Levels 7-8, and fulfills the one semester .5 credit graduation requirement for this level. The SPECIALIZATION area is the high school standard 9-12, and may be approached in a variety of ways, any of which will fulfill the one semester .5 credit graduation requirement.

PHILOSOPHY

All students in the state of Utah should have the opportunity to become better learners. Information technologies--specifically computer literacy--enable students to function in a computer and information-based society. Students must meet their own needs and the needs of society by using computers and their applications. Students must develop the skills necessary to communicate effectively with and through computers to help their lifelong learning. They should realize the implications and potential of computers relative to an information society and the world in which they live.

The teaching of programming languages is beyond the scope of the core. Simple programming to illustrate certain concepts may be appropriate. More extensive programming experiences with the computer as the object of instruction is not part of the core.

It should be the intent of programming experiences to help the student control information technologies to aid in problem solving.

It is recommended that districts implement informal keyboard awareness at Levels K-3, become more formal as to key location, function, etc., in Levels 3-5, and monitor keyboard use through Levels 6-8. Formal keyboarding instruction involving such topics as speed, accuracy, style, etc., should begin no later than Level 8. This approach makes it possible for students to use more information technologies more efficiently at an earlier age, and allows for less dedication of teachers and hardware for teaching keyboarding skills. In addition, current classes at the secondary level designed to teach typing (keyboarding) skills could remain somewhat intact and simply reinforce and extend proper skills already initiated at earlier levels.

IMPLEMENTATION

Districts are encouraged to have a phased implementation plan that allows for the systematic and orderly development of a local curriculum that contains the approved state standards for information technology studies. This plan should also address the necessary allocation of local resources for the training of teachers and acquisition of hardware and software in support of the curriculum.

Utilization of the computer should be a part of normal school activities. Computer awareness concepts, embedded in the information technology studies standards for K-6, will be a part of the regular curriculum and taught, whenever possible, in tandem with other basic skills. In some cases, separate classes covering these computer awareness concepts may be desirable depending on the resources and expertise of the local schools.

In Levels 7-8 and 9-12 specific courses in computer use and specialization will be offered. These courses, along with the curriculum integration of the information technology studies standards in other courses and curricular fields, will give students the knowledge and skills necessary to make adequate choices relating to their educational goals and eventual life-style and career choices.

The Utah State Office of Education will assist districts in formulating their unique phased implementation plan. Many resources are available for district assistance including staff, evaluation services, data support, consortium assistance, specialized training and seminars, and the Utah Information Technology Demonstration Center.

CORE CURRICULUM FOR INFORMATION TECHNOLOGY STUDIES

PRIMARY AWARENESS

Course Description:

The information technology studies in Levels K-3 emphasize the study of the fundamental operation of computers and related information technologies. Specifically, the standards focus on two major abilities: (1) identifying and operating the major parts of a computer system; (2) loading and running an existing program or procedure. Keyboarding skills are taught at a beginning awareness level.

PRIMARY LEVEL

STANDARD 1	The students will identify the major parts of a computer (information) system.

OBJECTIVES

1. Identify various devices used to put information (data) into a computer such as tape player, disk drive, touch sensitive screen, keyboard, card reader, and cartridge (input).
2. Identify various devices used to store, display, or print information processed by a computer such as tape player, disk drive, video monitor, and printer (output).

STANDARD 2	The students will demonstrate basic start-up of a computer (information) system.

OBJECTIVES

1. Show the correct sequence for turning on the equipment.
2. Demonstrate the use of the keyboard and use of special purpose keys.
3. Demonstrate the procedure for turning off the equipment.

STANDARD 3	The students will demonstrate the general function and basic care of the major parts of a computer (information) system.

OBJECTIVES

1. Demonstrate the general input function of various devices such as tape drive, disk drive, touch sensitive screen, keyboard, card reader, and cartridge (input).
2. Demonstrate the general output function of devices such as tape players, disk drives, video monitors, and printers used to store, display, or print information processed by a computer (output).
3. Identify and avoid potential hazards to equipment operation such as magnetic fields, dirt/dust, heat, moisture, and abuse.

STANDARD 4	The students will load and run existing software.

OBJECTIVES

1. Demonstrate the correct procedure for loading an existing piece of software.
2. Demonstrate the correct procedure for making existing software run.

INTERMEDIATE AWARENESS

COURSE DESCRIPTION

The technology studies in Levels 4-6 continue to emphasize the study of the fundamental operation of computers and related information technologies. Specifically, the standards continue to focus on three major abilities: (1) operating the major parts of a computer system; (2) selecting, loading, and running a predefined program or procedure; and (3) developing a short procedure list using simple statements. Keyboarding skills are taught more formally than for beginning awareness operation so that students will use information technology productively.

INTERMEDIATE LEVEL

STANDARD 1	The students will demonstrate correct set-up and function of the major parts of a computer (information) system.

OBJECTIVES

1. Show the correct equipment configuration and connection.
2. Demonstrate loading and saving of programs.
3. Demonstrate the proper way to strike the keys using the appropriate finger placement.
4. Explain the function of the central processing unit including the control unit, the microprocessor (arithmetic/logic unit), permanent (ROM), and temporary (RAM) storage.
5. Demonstrate the correct procedure for protecting stored information (tape, disk, etc.).

STANDARD 2	The students will define the symbols, operations, and sequence of events (procedure) used to accomplish tasks.

OBJECTIVES

1. Identify the symbols and operations used to develop a procedure (set of instructions).

2. Develop a procedure for a daily activity such as getting a drink, making a telephone call, or other given task.
3. Read and carry out a given procedure.
4. Develop a procedure for a given task.

STANDARD 3	The students will develop and run a short procedure using simple language structures.

OBJECTIVES

1. Demonstrate that a computer needs instructions to operate. These instructions are written in a structured language by people.
2. Demonstrate that a computer usually gets instructions from its human user through prompts, menus, simple language statements, etc.
3. Demonstrate that computer programs are sets of instructions that enable the computer to print, calculate, and perform other functions.

STANDARD 4	The students will develop strategies for accomplishing tasks using a defined procedure.

OBJECTIVES

1. Formulate the steps to the solution of a problem using a procedure(s).
2. Order the steps to the solution of a problem.
3. Follow and give the correct output for a simple procedure.
4. Given a simple procedure, explain what it accomplishes.
5. Detect logic errors (incorrect operation) in a procedure.
6. Correct errors in an improperly functioning procedure.
7. Develop a procedure for solving a specific problem.

8. Modify the above procedure to accomplish a new but related task.
9. Use several procedures to solve a problem.

STANDARD 5

The students will decide if information technology is appropriate as an aid in accomplishing a particular task.

OBJECTIVES

1. Identify the tasks information technology can do better than people (i.e., dangerous or repetitive tasks and faster manipulation of data).
2. Identify the task to be performed.
3. Decide whether technology can perform the task or solve the problem efficiently.

STANDARD 6

The students will identify present and future impacts of information technology on society.

OBJECTIVES

1. Explain the role of early computers and how they brought about changes in work and daily living.
2. Articulate the current and future role of information technology in assisting man.
3. Cite examples of areas of information technology use such as business, industry, medicine, law, law enforcement, weather prediction, education, libraries, information centers, and the creative arts.

LEVELS 7 - 8

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Information Technology Utilization	.5	Mastery of K-6 Level

COURSE DESCRIPTION

The information technology studies in Levels 7-8 emphasize the study of the effective use of computers and other information technologies as a productive tool. Specifically, the standards focus on two major abilities: (1) selecting and using information technologies and procedures to meet specific needs, and (2) an awareness of social and ethical issues relative to the use of information technologies. A laboratory setting would best facilitate the teaching of these concepts, but other approaches are also viable. Formal keyboard training should be continued at this level.

STANDARD 1	The students will use information technology as an aid to manage information effectively.

OBJECTIVE

1. Explain why computers are best suited for tasks requiring speed, accuracy, and repetitive operations.
2. Use the information storage and retrieval capabilities of a computer data base management program.
3. Use computers to search, sort, delete, update, and summarize data.
4. Use information technology to analyze data.
5. Use computer graphics to display information visually (i.e., graphs and illustrations).
6. Use information technologies to predict, interpret, and evaluate data for decision-making.
7. Use "word processing" and discuss its various uses.
8. Use a computer "spread sheet."
9. Describe how information technology can be used in control functions such as computer assisted drafting and artificial intelligence.

STANDARD 2	The students will identify the information technology best suited for specific applications and needs.

OBJECTIVES

1. Identify how information technologies are most commonly used and briefly state the reasons.
2. Cite examples and uses of information technology programs available today.
3. Point out that cost is a factor in determining information technology use.
4. Identify the sparse availability of software as a major limitation of computer use and give reasons for this problem.
5. Demonstrate how the storage capacity of computer systems is a key factor in selection.
6. Determine the factors that must be considered when choosing the appropriate information technology for a specific task.
7. Demonstrate the uses of different types of networks to handle information from internal/external sources including electronic mail.

STANDARD 3	The students will select software appropriate to their needs.

OBJECTIVES

1. Select a suitable evaluation instrument.
2. Select software and evaluate it in terms of its intended function, compatibility, ease of operation and relationship to the task.

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Information Technology Specialization	.5	Mastery of Level 7-8

COURSE DESCRIPTION

Information technology specialization for Levels 9-12 covers three major areas. Each of these areas may vary as to the degree of sophistication and emphasis depending on the needs of the students in a given curriculum cluster or emphasis. That is, each of the standards are to be applied in an appropriate delivery and content setting relative to the skills, abilities and needs of the students the curriculum is serving. The areas focus on the following: (1) using efficient and appropriate software to organize optimal information technology solutions to problems, (2) determining possible job opportunities and related skills in areas impacted by information technology, and (3) identifying and understanding societal issues relating to the use of information technologies.

STANDARD 1	The students will identify the types and availability of jobs that use information technology.

OBJECTIVES

1. Identify the educational requirements for various career opportunities that use information technologies.
2. Identify the educational requirements for career opportunities in the design, construction, and repair of technology equipment.
3. Identify the jobs available in the immediate community directly associated with information technology.

STANDARD 2	The students will identify how information technologies may be used in the future.

OBJECTIVES

1. Identify future application problems, including robotics and artificial intelligence.
2. Explain potential solutions for current application problems.

3. Write a narrative describing the future uses of information technologies.

STANDARD 3

The students will use available software to identify problems and potential solutions.

OBJECTIVES

1. Forecast and identify trends using computer simulations.
2. Demonstrate the use of computer modeling and simulation.

STANDARD 4

The students will identify issues, such as privacy and the distribution of social and finanical power concerning information technologies.

OBJECTIVES

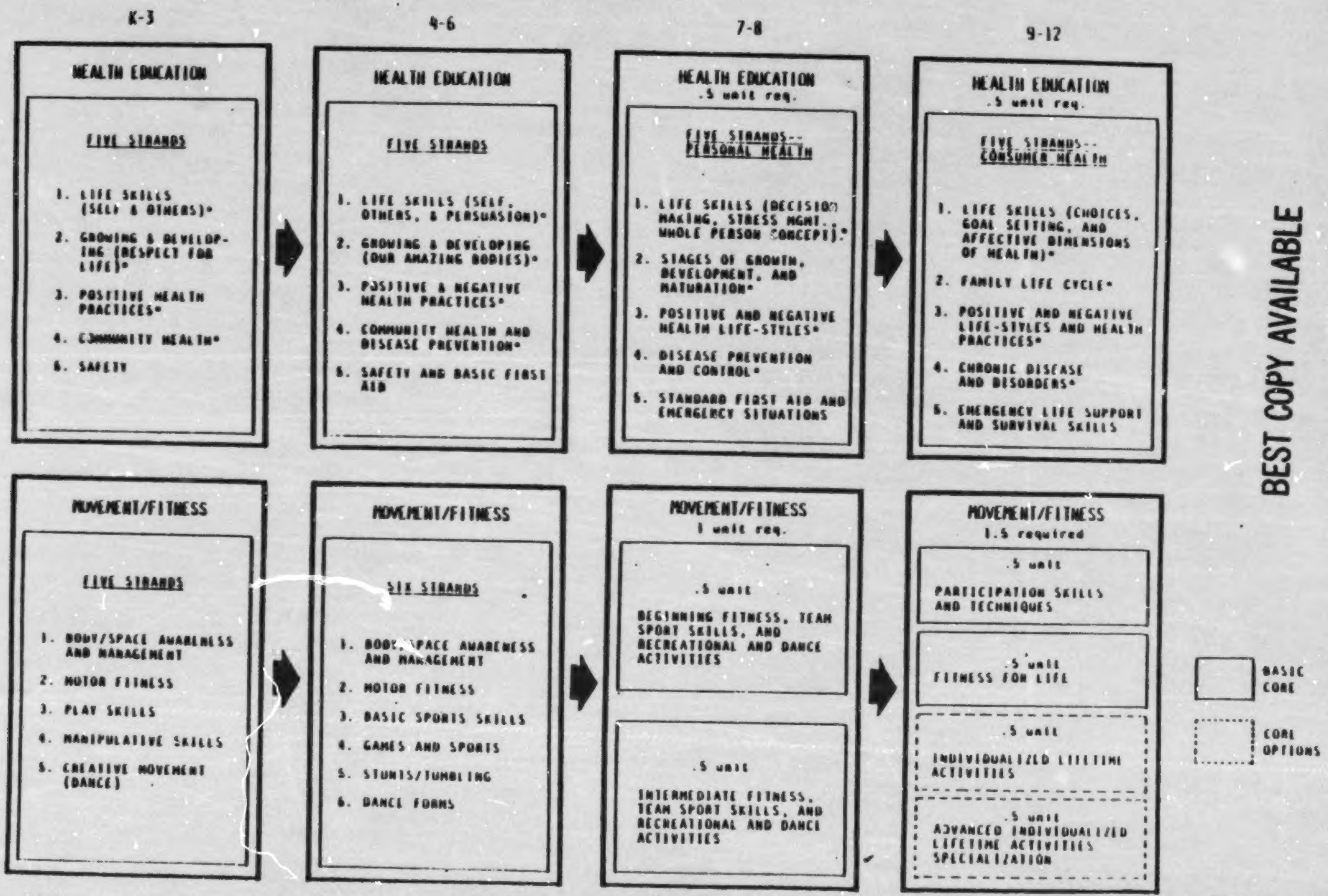
1. Demonstrate how information technology can personalize or impersonalize fields such as education, government, etc.
2. Demonstrate how the misuse of information may invade personal privacy.
3. Demonstrate how information technologies may affect the distribution and use of economic, political, and military power.
4. Describe the impact of rapidly evolving information technologies on consumer rights, copyrights, etc.

Section G

HEALTHY LIFESTYLES

RECOMMENDED FIELD TRIAL

HEALTHY LIFE-STYLES
MOVEMENT, FITNESS, AND HEALTH EDUCATION CORE



K-3	4-6	7-8	9-12
HEALTH EDUCATION	HEALTH EDUCATION	HEALTH EDUCATION .5 unit req.	HEALTH EDUCATION .5 unit req.
FIVE STRANDS 1. LIFE SKILLS (SELF & OTHERS)* 2. GROWING & DEVELOPING (RESPECT FOR LIFE)* 3. POSITIVE HEALTH PRACTICES* 4. COMMUNITY HEALTH* 5. SAFETY	FIVE STRANDS 1. LIFE SKILLS (SELF, OTHERS, & PERSUASION)* 2. GROWING & DEVELOPING (OUR AMAZING BODIES)* 3. POSITIVE & NEGATIVE HEALTH PRACTICES* 4. COMMUNITY HEALTH AND DISEASE PREVENTION* 5. SAFETY AND BASIC FIRST AID	FIVE STRANDS--PERSONAL HEALTH 1. LIFE SKILLS (DECISION MAKING, STRESS MGMT., WHOLE PERSON CONCEPT)* 2. STAGES OF GROWTH, DEVELOPMENT, AND MATURATION* 3. POSITIVE AND NEGATIVE HEALTH LIFE-STYLES* 4. DISEASE PREVENTION AND CONTROL* 5. STANDARD FIRST AID AND EMERGENCY SITUATIONS	FIVE STRANDS--CONSUMER HEALTH 1. LIFE SKILLS (CHOICES, GOAL SETTING, AND AFFECTIVE DIMENSIONS OF HEALTH)* 2. FAMILY LIFE CYCLE* 3. POSITIVE AND NEGATIVE LIFE-STYLES AND HEALTH PRACTICES* 4. CHRONIC DISEASE AND DISORDERS* 5. EMERGENCY LIFE SUPPORT AND SURVIVAL SKILLS
MOVEMENT/FITNESS	MOVEMENT/FITNESS	MOVEMENT/FITNESS 1 unit req.	MOVEMENT/FITNESS 1.5 required
FIVE STRANDS 1. BODY/SPACE AWARENESS AND MANAGEMENT 2. MOTOR FITNESS 3. PLAY SKILLS 4. MANIPULATIVE SKILLS 5. CREATIVE MOVEMENT (DANCE)	SIX STRANDS 1. BODY/SPACE AWARENESS AND MANAGEMENT 2. MOTOR FITNESS 3. BASIC SPORTS SKILLS 4. GAMES AND SPORTS 5. STUNTS/TUMBLING 6. DANCE FORMS	.5 unit BEGINNING FITNESS, TEAM SPORT SKILLS, AND RECREATIONAL AND DANCE ACTIVITIES .5 unit INTERMEDIATE FITNESS, TEAM SPORT SKILLS, AND RECREATIONAL AND DANCE ACTIVITIES	.5 unit PARTICIPATION SKILLS AND TECHNIQUES .5 unit FITNESS FOR LIFE .5 unit INDIVIDUALIZED LIFETIME ACTIVITIES .5 unit ADVANCED INDIVIDUALIZED LIFETIME ACTIVITIES SPECIALIZATION

* FULFILLS STATE LAW REQUIREMENTS

BEST COPY AVAILABLE

HEALTHY LIFESTYLES
HEALTH EDUCATION COMPONENT
K-3

COURSE DESCRIPTION

Health education actively involves students in coping with many of the problems encountered in life. These problems are identified through five strands: life skills, growing and developing, positive health practices, community health, and safety. Each student will be assessed in their knowledge and practice related to these five strands.

NOTE: To comply with state school law, teachers are encouraged to use the teaching resource files for the Alcohol and Drug Prevention Education Program in helping students achieve these standards.

LEVEL K

STANDARD 1	The students will understand healthy life skills and the role of the family unit.

OBJECTIVES

1. Recognize that individuals are special even though they are different in looks, size, and appearance.
2. Name different feelings.
3. Identify ways to get along with others.
4. Understand that the family is the basic social unit of life, and that everyone is a part of a family.
5. Identify persons in their family with whom they can share feelings.
6. List ways that family members show that they are a friend.

STANDARD 2	The students will learn about their own physical growth and development

OBJECTIVES

1. Observe how people grow.
2. Differentiate between the terms height and weight.
3. Describe how their bodies change in height and weight as they get older.

STANDARD 3	The students will understand how a person's choices and habits lead to a happy, healthy life.

OBJECTIVES

1. Learn that all living things need food for growth, development, and maintenance of health.
2. Understand that nutritious foods, including the eating of breakfast regularly, contributes to health and well-being.
3. Tell ways exercise helps keep people healthy.
4. Recognize that regular sleep and rest contribute to health and well-being.
5. Understand that cleanliness is important to health.
6. Learn to brush their teeth.

STANDARD 4	The students will learn that the environment can make a difference in one's health.

OBJECTIVES

1. Identify several reasons for keeping homes and schools orderly and clean.
2. Identify several reasons for returning toys, games, articles of clothing, etc., to their proper places after use.

STANDARD 5

The students will learn ways to be responsible for their own personal safety and for the safety of others at home and school.

OBJECTIVES

1. Explain the safest route to and from school.
2. Describe how to cross a street safely.
3. List several ways to be safe at home and school.
4. Identify people who help them maintain safety, e.g., firemen, policemen, crossing guards, teachers.

LEVEL 1

STANDARD 1

The students will develop and practice healthy life skills including a positive self-image in their relationships with family and friends.

OBJECTIVES

1. Identify and describe different feelings.
2. Tell how love and caring may be shown to others.
3. Identify positive activities families might do together.
4. Describe how family members might help one another.
5. Describe what they like about a friend.
6. Discuss the importance of sharing.

STANDARD 2

The students will develop a knowledge and understanding of growth and development.

OBJECTIVES

1. Discuss ways the body grows, e.g., height, weight, size of head, length of arms, size of feet.
2. List similarities and differences of individuals with regard to size, shape, color of hair, color of eyes, etc..
3. Explain the difference between baby teeth and permanent teeth.

STANDARD 3

The students will identify ways they can be responsible for their own health.

OBJECTIVES

1. Explain reasons for eating the right kinds of food daily.

2. Identify the four food groups and name several foods within each group.
3. Explain the importance of daily exercise.
4. Tell why regular sleep and rest contribute to one's health and well-being.
5. Tell why cleanliness, grooming, posture, and body mechanics are important.
6. Accept the responsibility to brush their teeth regularly.
7. Identify ways medicine may be helpful or harmful.
8. Display kindness and consideration for others.

STANDARD 4

The students will begin to understand the role of the community and the environment in health.

OBJECTIVES

1. Describe ways that the environment affects health, e.g., water, air, and garbage.
2. Define the word pollution and describe various kinds.
3. Discuss the health services provided by schools and hospitals.
4. Describe services provided by doctors, dentists, nurses, and pharmacists.

STANDARD 5

The students will begin to explain ways they can be responsible for their own personal safety and the safety of others.

OBJECTIVES

1. Identify safety procedures in walking to and from school.
2. Describe what to do when approached by a stranger whether in person or on the telephone.
3. Discuss the role of police officers and other safety helpers.

4. Explain rules for safety in the home, on the playground, and at school.

5. Identify basic safety rules for riding a bicycle.

LEVEL 2

STANDARD 1

The students will describe feelings and attitudes in their interactions with family and friends.

OBJECTIVES

1. Recognize why people have a variety of different feelings and that it is normal to express feelings.
2. Describe characteristics they like about themselves.
3. Describe ways families may be different.
4. Discuss reasons why families and schools have rules.
5. Tell how friends may help one another.
6. Identify school situations that result in strong feelings and pantomime such feelings to the class.

STANDARD 2

The students will describe how growth, development, and respect for life affects them.

OBJECTIVES

1. Recognize that all living things come from other living things and show respect for them.
2. Understand and accept that people have individual patterns of growth.
3. Identify the five senses and explain their value in staying healthy.
4. Discuss how teeth grow.

STANDARD 3

The students will make positive choices that contribute to a healthy life.

OBJECTIVES

1. Explain the difference between good and bad snacks.

2. Tell why rest is needed for good health.

3. Discuss causes of plaque and cavities, and the benefits of brushing, flossing, and fluoride treatments.

4. Explain positive care of the eyes, ears, and nose.

5. Explain why smoke is irritating to the body, e.g., burning leaves, campfire smoke, and cigarettes.

6. Classify healthy and unhealthy beverages.

STANDARD 4

The students will continue to understand the role of the community and the environment in health.

OBJECTIVES

1. Explain the importance of following the advice of doctors, dentists, and nurses.

2. Explain the benefits of having a clean outdoors, and list ways of keeping the outdoors clean.

3. Describe the benefits of keeping homes clean.

4. Describe how water, air, and land may be polluted, and the potential effects on health.

STANDARD 5

The students will show responsibility for their own safety and the safety of others.

OBJECTIVES

1. Explain the value of the five senses in keeping safe.

2. Observe bicycle safety rules.

3. Observe pedestrian safety rules.

4. Observe playground safety rules.

5. Understand the importance of and participate in school emergency drills .

6. Discuss a home evacuation plan with their parents.
7. Discuss the importance of keeping dangerous substances our of the reach of babies and younger children.
8. Identify basic water safety rules.
9. Describe ways to help police officers identify strangers who may approach students. Describe what to do when approached by a stranger.
10. Understand that they are in charge of their own bodies and that others do not have a right to touch or fondle them.

LEVEL 3

STANDARD 1

The students will explain how a positive self-image, interaction with others, and the role of the family unit are influenced by associations with people.

OBJECTIVES

1. Tell why liking one's self is important for the development of a positive self-image and good mental health.
2. Describe the importance of congenial relationships with other students and adults.
3. List ways personal habits and attitudes determine, in part, how we feel about ourselves and how others feel about us.
4. Identify basic steps in making responsible choices.
5. Discuss how different people deal with feelings of fear, anger, and hate.

STANDARD 2

The students will evaluate growth and development patterns.

OBJECTIVES

1. Understand that their bodies are made of many cells which divide and make them grow.
2. Indicate some of the growth characteristics they inherited from their father and mother.

STANDARD 3

The students will accept responsibility for their own health and practices.

OBJECTIVES

1. Describe how daily health practices make a difference in their appearance, health, feelings of personal worth, and acceptance by others.

2. Define basic nutrients that come from the four basic food groups.
3. Identify foods in the four food groups and explain the need for a balanced diet.
4. Discuss problems that result from eating too much sugar.
5. Plan a balanced meal.
6. Continue brushing and flossing the teeth.
7. Discuss the health implications of a person choosing to smoke or not to smoke.
8. Classify different types of alcohol distinguishing between positive and negative uses.

STANDARD 4

The students will describe a variety of community services and noise pollution.

OBJECTIVES

1. Discuss the many services provided by the community, such as ambulances, poison control centers, paramedics, and rescue teams.
2. Discuss noise pollution and its affect on health.

STANDARD 5

The students will show responsibility for their own safety and learn ways to respond in emergencies.

OBJECTIVES

1. Explain how carelessness, hurrying too fast, anger, and upset feelings increase one's chance for having an accident.
2. Practice safe principles when riding a bicycle, in an automobile or school bus.
3. Identify and observe traffic signs and signals.
4. Recognize that getting adult help is one of the first things to do in an emergency.

HEALTHY LIFESTYLES
HEALTH EDUCATION COMPONENT
4 - 6

COURSE DESCRIPTION

Health education focuses upon the general growth and development characteristics of elementary age students and continues to strengthen and expand the five strands: life skills, growing and developing, positive and negative health practices, community health and disease prevention, and safety and first aid. Each student will be assessed in their knowledge and practice related to these five strands.

NOTE: To comply with state school law, teachers are encouraged to use the teaching resource files for the Alcohol and Drug Prevention Education Program in helping students achieve these standards.

LEVEL 4

STANDARD 1

The students will practice healthy life skills through social interaction and coping with pressures.

OBJECTIVES

1. Assess their feelings about their personal strengths and weaknesses.
2. Explain why relaxation, varied interests, and physical activity are important in becoming a well-adjusted person.
3. Differentiate between behaviors that contribute to a positive attitude and those that indicate a negative attitude.
4. Define stress and describe how it affects one's physical and mental well-being.
5. Differentiate between healthful stress and harmful stress.
6. List and explain the steps to good decision making.

STANDARD 2

The students will increase their understanding of growth and development as they begin to mature.

OBJECTIVES

1. Describe how the body grows in size and explain why people of the same age are often different in height and weight.

2. Identify the body systems and briefly describe the general function of each: circulatory, respiratory, digestive, skeletal, muscular, nervous, and glandular.

STANDARD 3	The students will learn additional ways to be responsible for their own health and develop positive habits

OBJECTIVES

1. Identify foods that contain proteins, carbohydrates, and fats and state why each is needed for good health.

2. List the major vitamins, what they do, and identify foods that contain them.

3. Discuss two minerals needed for good health.

4. Discuss the need for water.

5. Select a balanced lunch with servings from each of the four food groups.

6. Explain the relationship between exercise, food intake, and weight control.

7. Continue brushing and flossing the teeth.

8. Discuss how daily health practices can affect one's appearance, health, and acceptance by others.

9. List and discuss messages they have received and perceived about alcohol and tobacco.

10. Discuss why some adults do/don't drink or do/don't smoke.

11. Discuss a variety of social, health, and economic problems associated with the use and abuse of alcohol and drugs.

12. Discuss some of the potential hazards of the misuse of medicines.

13. Recognize that they often influence one another in health-related decisions and behavior.

STANDARD 4

The students will learn ways to improve the quality of the environment and control diseases.

OBJECTIVES

1. Discuss services provided by doctors, dentists, nurses, pharmacists, optometrists, psychologists, sanitation inspectors, and other health providers.
2. Identify and define bacteria, viruses, protozoan, and fungi.
3. Discuss how diseases and illnesses can be spread by people, insects, animals, food, and water.
4. Explain several ways the body defends itself against disease.
5. Discuss the importance of medicines, vaccines, and boosters in preventing diseases.
6. List some steps a community might take to keep their environment free from diseases.

STANDARD 5

The students will identify personal safety practices and explain basic first aid skills.

OBJECTIVES

1. Describe ways to prevent accidents while playing and participating in sports and games.
2. List safety rules for the home including ways to prevent falls, avoid accidental poisonings, etc.
3. Demonstrate first aid procedures for animal and insect bites, burns, cuts, scratches, and bleeding.
4. Describe what to do when a stranger or a person they might know attempts to touch them intimately or fondle them.
5. Describe procedures to follow in case of fire, floods, electrical shock, poisonings, earthquakes, and other emergencies.

LEVEL 5

STANDARD 1

The students will add to their healthy life skills, including coping with peer pressures.

OBJECTIVES

1. Practice effective communication skills.
2. Describe ways that personal health behavior might affect the health of others.
3. Select appropriate ways of sharing feelings of success and disappointment.
4. Show how general economic status, where we live, parents, school, and peers influence one's personality and our perceptions of others.
5. List techniques that can help them resist anti-personal and anti-social persuasion from peers, adults, or the media.

STANDARD 2

The students will identify patterns and processes of an individual's growth and maturation.

OBJECTIVES

1. Cite examples of how different people grow at different rates and on a personalized time schedule.
2. Draw, label, and discuss the major sense organs (skin, eyes, nose, ears, mouth).
3. Define pulse and blood pressure.
4. Discuss blood types (A, AB, B, O).
5. Draw, label, and discuss the heart and its function.
6. Draw, label, and discuss the respiratory system and its function.
7. Draw, label, and discuss the main parts of the digestive system and its function.

8. Draw, label, and discuss a long bone in the arm or leg identifying the two growth margins.

9. Describe the growth related functions of the endocrine system including the thyroid and pituitary glands.

STANDARD 3	The students will select positive health practices.

OBJECTIVES

1. Explain the importance of good nutrition as it affects the systems of the body.
2. Plan three balanced meals for a day (breakfast, lunch, and dinner).
3. Identify and discuss several nutritional deficiency diseases.
4. Explain healthful care of eyes, ears, skin, hair, and nails.
5. Evaluate reasons people often give for smoking.
6. Discuss the relationship between tobacco use and the loss of health and premature death.
7. Discuss the interrelationship of health problems, cigarette smoking, drug and alcohol use, and the cost of medical care.
8. Review the history of alcoholic beverage use.
9. Discuss some physiological and psychological effects of alcohol use.

STANDARD 4	The students will continue to learn ways to improve the environment and control disease.

OBJECTIVES

1. Discuss services provided by the local public health department.
2. Explain the kinds of services provided by hospital emergency centers, clinics, paramedics, and poison control centers.

3. Explain the importance of waste disposal landfills, water treatment, and sewage treatment.

4. Discuss anti-pollution laws.

5. Discuss how conservation can contribute to decreasing pollution.

6. Describe several specific health problems resulting from polluted air, polluted water, polluted land, and noise pollution.

7. List several common communicable, diseases and methods of prevention.

8. Discuss the role of antibodies in fighting diseases.

9. Contrast the difference between allergies and diseases and their general treatment.

STANDARD 5	The students will identify safety practices and follow general first aid procedures.

OBJECTIVES

1. Perform a home safety survey and make efforts to improve the safety of their home.

2. List and discuss safety practices in activities such as cycling, swimming, skateboarding, and winter sports.

3. Demonstrate how to use a first aid kit, fire extinguisher, and other safety equipment.

4. Know that 911 is the general emergency telephone number, and know where to find additional emergency numbers in the telephone book.

5. Demonstrate basic first aid for cuts, burns, bumps, heat stroke, animal bites, frostbite, poisonings, broken bones, fainting, electrical shock, and choking.

LEVEL 6

STANDARD 1

The students will continue to expand and practice healthy life skills.

OBJECTIVES

1. Chart and discuss the steps of decision making.
2. Identify and discuss positive ways to cope with strong feeling.
3. Give examples of how health knowledge can be used to make good health decisions.
4. Define physical, mental, and social health.
5. Discuss the importance of personal interests, aptitudes, and attitudes in setting and reaching personal goals.
6. Identify sources of stress and distinguish between situations they can and cannot control.

STANDARD 2

The students will explain the growth and maturation processes of beginning adolescence.

OBJECTIVES

1. Draw. label, and discuss the three main parts of the central nervous system, i.e., brain, spinal cord, and nerves.
2. Draw, label, and discuss the three main parts of the brain, i.e., cerebrum, cerebellum, and brain stem (medula).
3. List and explain the basic functions of the glands of the endocrine system, i.e., pituitary, thyroid, parathyroid, adrenal, and gonads (ovaries and testes).
4. Specify physical and emotional changes brought on by each of the five glands above.
5. Identify and discuss growth and developmental changes which occur upon entry of adolescence (puberty).
6. Recognize that adolescence results in physical, social and emotional changes.

7. Explain the two processes of cell division (mitosis and meiosis).
8. Identify six physical characteristics that are inherited, e.g., attached or lobed ears, eye color, height, body guild, skin color, hair color, and discuss recessive and dominant genes.
9. Discuss the role of X and Y chromosomes in determining sex.
10. Draw, label, and discuss the epidermis, dermis, and fat layer.
11. Identify the major bones in the skeletal system and their functions.
12. Describe the muscular system and explain its general function.
13. Explain growth spurts experienced during adolescence.
14. Discuss joints and identify movable and immovable joints.
15. Identify and discuss voluntary and involuntary muscles.
16. Know the body changes that accompany entrance into puberty and adolescence.

STANDARD 3

The students will analyze health issues and determine positive health choices.

OBJECTIVES

1. Chart and analyze what they eat for breakfast for one week.
2. Describe the effects of nutritional excesses of fat, salt, and sugar on health.
3. Report on the healthful preparation and cooking methods of food including modern food processing, chemical additives, and pesticides.
4. Discuss cleanliness and grooming as they relate to puberty and adolescence.
5. List and discuss the six general categories of drugs of use and abuse.

tobacco
narcotics
depressants
psychodelics
stimulants
marajuana

6. Analyze advertising and promotion of drugs with special emphasis on alcoholic beverages.
7. Practice risk reduction skills dealing with persuasion and pressure from peers, adults, advertising, etc.
8. Discuss the effects of various blood alcohol levels on different body systems.
9. Identify and discuss common myths about alcohol and drugs.
10. Identify and discuss eight health practices associated with less illness and longer life expectancy.

STANDARD 4

The students will recognize community health providers and seek appropriate assistance as needed.

OBJECTIVES

1. Explain why it is important to know the symptoms of common diseases, illnesses, and disorders, and what to do about them.
2. Discuss the value of the Truth in Advertising Law when it comes to common "health and health-related" products, such as aspirin, shampoo, cold remedies, allergy medication, acne preparations, etc.
3. Recognize and discuss special Medical Alert identification for persons with chronic health problems such as epilepsy, diabetes, hemophelia, heart disease, and allergies.
4. Describe the importance of a thorough physical examination in maintaining health and preventing illness.
5. Analyze the value of maintaining a health history, including height, weight, immunizations, accidents, and major illnesses.

STANDARD 5

The students will identify general safety practices and demonstrate appropriate emergency procedures.

OBJECTIVES

1. Identify baby sitting safety practices.

2. Develop a personal list of people who might be contacted for help in an emergency.
3. Describe the information to be give when telephoning for help.
4. View a demonstration of cardiopulmonary resuscitation (CPR), rescue breathing (mouth-to-mouth), and the Heimlich maneuver.
5. Discuss what to do for various natural disasters.

HEALTH EDUCATION

7 - 8

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Personal Health	0.5	Mastery of Level 6

COURSE DESCRIPTION

Many lifelong practices and habits are learned and acquired during childhood and youth. These growing and developing years are extremely important to the establishment of sound health practices.

This one semester course develops the skills needed to improve the quality of life by helping students to cope with and solve problems, and make better decisions. The students will further explore the five strands as identified in Levels K-6: life skills; growth, development, and maturation; positive and negative healthy life-styles; disease prevention and control; and first aid care.

NOTE: To comply with state school law, teachers are encouraged to use the teaching resource files for the Alcohol and Drug Prevention Education Program to help students achieve these standards.

STANDARD 1	The students will continue to recognize, develop, and practice life skills that are associated with improved mental health and quality of life.

OBJECTIVES

1. Demonstrate the decision-making process relative to health issues.
2. Identify and discuss the relationship of effective and non-effective communication skills to personal health.
3. Recognize, identify, and discuss positive, neutral, and negative health practices that are directly affected by a variety of persuasive sources, e.g., peers, media, and advertising.
4. Discuss the relationship between stress and disease.
5. Distinguish between positive and negative coping behaviors.
6. Discuss the emotional stages encountered with divorce, death, and dying, and explore coping skills.

7. Discuss the interrelationship of physical, social, and mental health (health triangle).
8. Explain the effects of emotions and emotional needs on behavior.
9. Identify factors that influence self-image.
10. Discuss ways to improve self-image.
11. Explain how personal health habits can contribute to the quality of life.
12. Evaluate their present health practices.
13. Formulate a plan of action to improve their personal health practices.
14. Explain how good citizenship contributes to improved health and quality of life.

STANDARD 2	The students will understand how achieving maturity (physical, emotional, social, intellectual, and ethical) leads to responsible behavior which contributes to improved health and quality of life.

OBJECTIVES

1. Describe the effects of emotion, exercise, disease, and high risk health habits (smoking, alcohol consumption, etc.), on the body systems.
2. Describe the stages (infancy, childhood, adolescence, adulthood) of human development and the unique contribution healthy living makes to each stage.
3. Discuss how responsible behavior during adolescence and youth impacts health during middle and old age.
4. Describe secondary sex development for both males and females.
5. Explain why maturity is multidimensional (physical, emotional, social, intellectual, and ethical).
6. Explain how achieving "maturity" in all dimensions leads to responsible behavior.
7. Discuss rape, incest, and child abuse and recognize how to avoid such problems as well as where help is available.

STANDARD 3	The students will continue to recognize, develop, and practice life-styles that are associated with improved physical health and quality of life.

OBJECTIVES

1. Explain how good nutrition is associated with feeling good and performing well.
2. Explain the concept of caloric input and expenditure as it relates to maintaining desired body weight.
3. Explain the benefits of exercise, sleep, and relaxation on overall health.
4. Explain why specific personal hygiene practices (cleanliness and grooming), are especially important to the social, physical, and emotional health of middle school students.
5. Identify high risk activities and discuss the potential for harm and injury.
6. Identify the immediate and long-term physiological, psychological, and social effects that may result from the use of alcohol, tobacco, and other drugs.
7. Discuss reasons why some young people choose to use alcohol, tobacco, and drugs.
8. Identify and discuss common myths about the use of alcoholic beverages.
9. Identify positive alternatives to the use of tobacco, alcohol, and other drugs.
10. Discuss problems that result from the misuse of over-the-counter and prescription drugs.
11. Discuss the importance of information that appears on prescription and over-the-counter drug labels.
12. Identify 12 chemicals of abuse and discuss their medical classification, symptoms of abuse, harmful effects, and penalties for illegal possession.
13. Discuss the stages of drug use and abuse.

STANDARD 4

The students will understand the importance of of making choices that diminish the potential for contracting communicable diseases.

OBJECTIVES

1. Discuss communicable diseases (including venereal disease).
2. Explain the basic cause-effect process of infection including methods of breaking the "chain of infection".
3. Explain current immunization practices for common communicable diseases of children, youth, and adults.
4. Identify the symptoms, problems, and cures for a variety of infectious diseases including those associated with contaminated food, water, environmental pollution, etc.

STANDARD 5

The students will demonstrate basic first aid procedures.

OBJECTIVES

1. Identify and describe the immediate first-aid procedure for (a) shock, (b) heart attack or stroke, (c) choking, (d) cessation of breathing, (e) severe bleeding, (f) fractures, (g) heat exhaustion and heat stroke.
2. Identify the best sources of help for (a) shock, (b) heart attack or stroke, (c) choking, (d) cessation of breathing, (e) severe bleeding, (f) fractures, (g) heat exhaustion and heat stroke.
3. Demonstrate the emergency procedure for treatment of minor cuts and abrasions, nose bleeds, pulled muscles, and sprains.
4. Explain accident prevention measures for summer activities, e.g., swimming, boating, cycling, camping, backpacking, hunting.
5. Explain accident prevention measures for winter activities, e.g., downhill and crosscountry skiing, snowmobiling, tubing.
6. Discuss how to protect one's self from natural disasters, e.g., windstorms, floods, earthquakes.

HEALTH EDUCATION

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Consumer Health	0.5	Personal Health

COURSE DESCRIPTION

This one semester course emphasizes the physical, social, and mental dimensions of people so that the students become intelligent consumers of health information. It offers students an opportunity to evaluate health practices, products, and services.

NOTE: To comply with state school law, teachers are encouraged to use the teaching resource files for the Alcohol and Drug Prevention Education Program to help students achieve these standards.

STANDARD 1

The students will recognize, develop, and practice skills that are associated with good consumer health and quality of life.

OBJECTIVES

1. Discuss overt and covert persuasion, e.g., mass media, peers, adult models, music, that influence health consumer choices.
2. Select, write, and evaluate short- and long-term goals for personal health and relate them to consumer decisions.
3. Recognize and list personal values, attitudes, and feelings relative to making consumer choices about health issues.

STANDARD 2

The students will explore the human life cycle from prenatal development through death.

OBJECTIVES

1. Discuss the purposes and social behavior appropriate for dating, courtship, and marriage.

2. Discuss the anatomy and physiology of the male and female reproductive systems.

3. Recognize and discuss the ethical, social, and emotional aspects of human sex and sexuality.

4. Discuss fetal development, the risk factors involved in pregnancy, and the birth process.

5. Identify various birth defects, their cause, and appropriate preventive measures.

6. Discuss the responsibilities of parenthood.

7. Discuss behaviors that contribute to being an effective parent.

8. Discuss the impact of becoming a single parent and raising a family.

9. Discuss methods of preventing or dealing with the problem of child abuse.

10. Discuss the crisis of rape and its consequences.

11. Describe the problems and positive aspects of aging.

12. Identify skills used in coping with death.

STANDARD 3	The students will explain the benefits of choosing to live a healthy life-style.

OBJECTIVES

1. Identify positive mental health traits that enable a person to be comfortable with self and others.

2. Describe acceptable ways to cope with periods of depression.

3. Identify and use effective ways to cope with or to reduce stress.

4. Describe the common mental disorders and their impacts, e.g., depression, neurosis, psychosis, and psychosomatic illnesses.

5. Recognize suicidal behaviors.

6. Identify community resources available for coping with mental disorders.

7. Describe possible harmful effects of unproven medical practices (quackery).

8. Distinguish between use, misuse, and abuse of legal and illegal drugs.
9. Evaluate the risks of drug use and identify positive alternatives.
10. Explain how a break from the normal routine offers a sense of play and enjoyment in life.
11. Contrast sleep, rest, and relaxation and explain the importance of each in living a healthy life-style.
12. Discuss potentially harmful substances and additives found in our modern food supply, e.g., salt, sugar, preservatives, food coloring.
13. Describe the long-term negative health effects of poor nutritional choices.
14. Describe the health dangers involved in extremely low calorie weight loss diets.
15. Identify common eating disorders and their causes.
16. Summarize and explain health practices associated with less illness and longer life expectancy.

STANDARD 4

The students will understand current practices for avoiding infectious and chronic diseases.

OBJECTIVES

1. Recognize the symptoms, prevention, and treatment of sexually transmitted diseases.
2. Define chronic diseases and disorders and recognize how they effect people.
3. Describe the major causes of and treatments for diseases such as cancer, heart-lung diseases, arthritis, etc.
4. Identify health care facilities.
5. Compare the concepts of self and public health care and discuss the appropriate use of each.

STANDARD 5	The students will demonstrate emergency life support and survival skills.

OBJECTIVES

1. Identify and describe general first aid priorities given to a person in case of an accident or sudden illness.

2. Demonstrate proper emergency medical skills for CPR, Heimlich, mouth to mouth resuscitation, control of bleeding, shock, poisoning, and care for fractured bones.

3. Discuss and demonstrate basic survival skills for natural and man-made disasters, e.g., earthquakes, nuclear contamination, floods, weather.

4. Define and discuss hypothermia.

CORE CURRICULUM FOR HEALTHY LIFE-STYLES--MOVEMENT, FITNESS AND HEALTH EDUCATION

PREFACE

The K-12 healthy life-styles (movement, fitness, and health education) curriculum provides daily opportunities for students to experience and develop (1) values and practices that enhance a healthy life; (2) wholesome decisions about a wide variety of personal, family, and societal health issues; (3) positive self-image; (4) movement, body awareness, and motor skills; (5) skills in a variety of team games, lifetime sports, recreational activities and dance; and (6) a personal life-style of regular physical activity. These experiences, along with other positive health practices, contribute to the quality of life for students and adults.

MOVEMENT AND FITNESS COMPONENT

K - 3

COURSE DESCRIPTION

The core program in movement and fitness for the primary grades focuses on body/space awareness and management, motor fitness, play skills, object manipulation and control, and beginning dance forms (creative movement). Students will gain knowledge about, understanding of, and appreciation for movement and physical activities.

NOTE: The K-3 dance objectives emphasize the qualities that turn movement into dance. All of them are to be achieved as group activities.

Standard 5 encourages understanding and experience with the participant and observer/listener roles, while Standards 6 and 7 encourage understanding for the critics role in dance.

When the term energy is used, it refers to the release, follow through, and termination of energy creating a quality of motion which is the key to making movement become dance. The basic qualities of motion are percussive (sharp and quick), sustained, and vibratory (trembling, collapsing, swinging, rebounding, and exploding).

LEVEL K

STANDARD 1

The students will demonstrate personal space and body awareness.

OBJECTIVES

1. Move in and maintain personal space, including starting and stopping on command.
2. Identify body parts used in a movement task.
3. Explore movement at low and medium levels (below knees, knees to shoulders).
4. Explore locomotor movement including walking, running, jumping, and hopping.
5. Move over a hoop, carpet square, rope, or line in various ways.
6. Invent or create different shapes the body can make (round, straight, curled, long, etc.)
7. Explore a variety of non-locomotor movements (bending, stretching, twisting, etc.).
8. Explore a variety of movements which involve maneuvering weight (pushing, pulling, lifting, etc.).

STANDARD 2

The students will begin to develop motor fitness.

OBJECTIVES

1. Run in different directions.
2. Jump up and down several times.
3. Swing the arms back and forth and make giant circles.
4. Pull the body from a lying position to a sitting position several times using a climbing rope.
5. Perform several curl-ups with knees bent and feet on the floor.

6. Hop on one foot several times without losing balance.
7. Walk on a rope or line (20 feet or longer) maintaining balance.
8. Briskly walk or run around the multipurpose room and/or the playground.
9. Run as fast as possible for 20 yards.

STANDARD 3

The students will follow simple rules, respect the personal space of others (safety) and be courteous.

OBJECTIVES

1. Participate in a variety of play activities requiring cooperation and playing by simple rules.
2. Contribute to safety by respecting the personal space of others.
3. Treat classmates and others courteously.

STANDARD 4

The students will begin to individually explore manipulative skills using medium to large sized soft objects.

OBJECTIVES

1. Roll, throw, and catch objects such as yarn balls, fleece balls, sponge balls, etc.
2. Repeatedly kick and chase a soft object on the floor.
3. Explore a variety of movements using objects including bean bags, yarn balls, hula hoops, wands, ropes, different sized balls, etc.
4. Use carpet squares and mats in exploratory movements.

DANCE COMPONENT

STANDARD 5	The students will perform introductory rhythm and dance movements that include time, space, energy, and shape. (Participant, Observer/Listener)

OBJECTIVES

1. Clap and move to the beat of various tempos (slow, medium, and fast).
2. Clap and move to simple rhythmic patterns based on such things as the syllables of names or other words.
3. Explore spatial concepts such as high-low, in-out, large-small, forward-backward, sideways and turning.
4. Create curved, straight, bent, and twisted shapes with the body.
5. Experience traveling through space: walking, running, hopping, jumping, galloping, and skipping.
6. Express through motion such things as textures, colors, senses, and emotions. (To stimulate exploration, the teacher might use words such as sad, happy, noisy, quiet, rough, smooth, red, pink, etc.)
7. Perform traditional and creative singing games and dances such as "Looby Loo," "London Bridges," "Did You Ever See A Lassie?"

STANDARD 6	The students will express feelings generated by observing and participating in dance. (Critic)

STANDARD 7	The students will participate in simple dances that reflect one or more cultures. (Participant)

LEVEL 1

STANDARD 1

The students will demonstrate locomotor and non-locomotor movements with an understanding of general space.

OBJECTIVES

1. Move in general space without infringing on the personal space of others.
2. Identify body parts and surfaces in a movement task.
3. Move in space changing to various levels (low, medium, high) on command.
4. Explore and experience locomotor movements (walking, running, jumping, hopping, leaping, skipping, galloping, and sliding) at slow and fast speeds.
5. Bend, stretch, and twist different parts of the body (legs, arms, trunk, etc.) while standing, sitting, and lying down.
6. Explore a variety of movements involving maneuvering weight (pushing, pulling, lifting, etc.) with an object.
7. While lying on the floor, make a number from zero to nine with the body.

STANDARD 2

The students will continue to develop motor fitness involving jumping, lifting, walking, balancing, running, swinging, hopping, etc.

OBJECTIVES

1. Jump forward, backward, and sideward over a line or rope on the floor several times.
2. Swing one arm at a time in different directions and at different levels.
3. Combine the movement of two arms in the same direction and in opposite directions.

4. Using a climbing rope, pull the body from a lying position to a standing position.
5. Support body weight on hands from a sitting position for several seconds.
6. With arms crossed on chest, perform several curl-ups with knees bent and feet on floor.
7. Sustain a variety of locomotor movements going forward, backward, and sideward.
8. Hop on one foot several times without losing balance, repeat on other foot.
9. Walk the length of a low balance beam without falling off.
10. Jump from a 2-foot height and land on a mat, grass, or sand without falling down.
11. Standing on both feet, with eyes closed, balance for 10 seconds.
12. Run in place for one minute.
13. Walk 600 yards at a brisk pace.
14. Run as fast as possible for 30 yards.

STANDARD 3	The students will follow simple rules and directions displaying respect for personal and general space.

OBJECTIVES

1. Participate in a variety of play activities requiring cooperation.
2. Listen to and follow simple directions.
3. Play by the rules in games and activities of low organization.
4. Contribute to safety by respecting the personal space of others.

STANDARD 4	The students will continue individual exploration of manipulative skills using a variety of objects.

OBJECTIVES

1. Roll, bounce, throw, catch, strike, and kick objects such as yarn, fleece, sponge, and playground balls.

2. Explore a variety of movements using objects such as bean bags, yarn balls, hula hoops, wands, ropes, and different sized balls.

3. Use carpet squares, mats, boxes, and benches in exploratory movements.

DANCE COMPONENT

STANDARD 5

The students will continue to perform introductory rhythm and dance movements that include time, space, energy, and shape. (Participant, Observer/Listener)

OBJECTIVES

1. Clap and move, accenting the first beat of every measure in 4/4 time.

2. Clap and move to simple rhythmic patterns based on such things as phrases or whole sentences.

3. Create symmetrical and asymmetrical shapes with the body.

4. Through movement, explore over/under, above/below, near/far, in front/behind, inside/outside, and around/through.

5. Move through space in various directions, e.g., walking, running, leaping, hopping, jumping, skipping, galloping, and sliding.

6. Improvise a sequence of energy (motion) changes, i.e., moving from lyrical (floating, gliding) to percussive (sharp, quick).

7. Perform traditional and creative singing games and dances such as "Bear Growl," "Statue Games," Jolly Is The Miller," "Muffin Man."

STANDARD 6

The students will express feelings generated by observing a dance. (Critic)

OBJECTIVES

1. Watch a dance (live, film, or video) and talk about the different kinds of movements.
2. Imitate, draw, or tell how a dance creates different feelings, moods, or expressions.

STANDARD 7	The students will identify dances from several different cultures. (Critic)

LEVEL 2

STANDARD 1

The students will demonstrate space awareness (personal and general), relationships (with body parts, people, places, and things), and exploratory movement.

OBJECTIVES

1. Move in general space changing directions and pathways.
2. Perform movement activities at different levels with a partner.
3. Combine various locomotor steps in a movement pattern changing speed and levels.
4. Place three parts of the body inside a space (hoop, carpet square, etc.) and two parts of the body outside.
5. Mirror the movements of a partner while changing body shapes.
6. Bend and stretch different parts of the body with a partner using varying speeds, e.g., stretch arm up slowly, then bend it back to original position slowly.
7. Explore a variety of movements involving maneuvering weight (pushing, pulling, lifting, etc.) with a partner.

STANDARD 2

The students will continue to develop motor fitness including strength, agility, balance, flexibility, speed/reaction time, and endurance.

OBJECTIVES

1. Demonstrate strength by (a) sustaining an arm hang from an overhead ladder or chinning bar for 8 seconds, and (b) doing a standing long jump equal to one's height.
2. Demonstrate agility by (a) jumping in, out, over, and around hoops, mats, or other obstacles several times in a row, and (b) jumping a rope or hoop turned by self 10 times.
3. Demonstrate balance by (a) walking the length of a balance beam, turning around, and walking back, and (b) balancing an object on different parts of the body while performing different locomotor movements.

4. Demonstrate flexibility by (a) grasping the fingers in the middle of the upper back for 5 seconds with one arm over the shoulder and the other behind the back, and (b) holding a stick or wand with both hands (palms down) and stepping through and back 3 times without letting go.

5. Demonstrate speed/reaction time by (a) running as fast as possible for 40 yards, and (b) changing directions upon a visual or verbal signal while doing a variety of locomotor movements.

6. Demonstrate endurance by (a) jogging 600 yards, and (b) jogging an accumulated total of 5 miles during one month. (NOTE: This might be done by jogging a minimum of a quarter of a mile a day, 440 yards.)

STANDARD 3

The students will follow simple rules and directions displaying respect for personal and general space.

OBJECTIVES

1. Participate in a variety of play activities requiring cooperation.
2. Listen to and follow directions in a positive manner.
3. Participate safely in games and activities of low organization.
4. Safely use equipment in activities.

STANDARD 4

The students will improve their manipulative skills using a variety of objects and parts of the body.

OBJECTIVES

1. Throw, catch, strike, and kick various sized balls or other objects.
2. In pairs explore a variety of movements using objects including bean bags, yarn balls, hula hoops, wands, ropes, and different size balls.
3. Recognize that manipulative skills change when different sized objects are used.

4. Use mats, boxes, benches, balance beams, risers, and climbing ropes in exploratory movements.

DANCE COMPONENT

STANDARD 5

The students will combine introductory rhythm and dance movements that include time, space, energy, and shape. (Participart, Observer/Listener)

OBJECTIVES

1. Clap and move, accenting the first beat of every measure in 2/4, 3/4, and 4/4 time.
2. Express the beat (2/4, 3/4, or 4/4 time) by changing the body part (arm, leg, etc.) the direction, the level, or the energy.
3. Clap the rhythmic pattern of a nursery rhyme, then move to the pattern individually or with a partner ending in a strong dramatic pose.
4. Create symmetrical and asymmetrical shapes with the body, alternating from one to the other.
5. Move through space changing the shape of the body at least three times.
6. Improvise a sequence of energy (motion) changes, i.e., moving from lyrical (floating, gliding) to percussive (sharp, quick). Use an occupation as a theme.
7. Perform traditional and creative singing games and dances such as "Round and Round The Village," "Bingo," "Here We Go Round the Mountain."

STANDARD 6

The students will identify how a dance creates feelings. (Critic)

OBJECTIVES

1. Describe what parts of a dance create a particular feeling or impression.

2. Tell or write what a choreographer might want one to think or feel.

STANDARD 7	The students will create a simple dance relating to one for more cultures. (Participant)

LEVEL 3

STANDARD 1

The students will demonstrate space awareness, (personal and general), and relationships (with body parts, people, places, and things) with an increased level of difficulty in exploratory movement.

OBJECTIVES

1. Move in general space with a partner changing directions and pathways.
2. Support weight on matching body parts (feet) similar body parts (arms and legs), and different body parts (feet and seat).
3. Participate in groups of two or more by placing body parts at different levels such as feet, knees, elbows, and head.
4. Place five parts of the body inside a space (hoop, carpet square, etc.) and one part of the body outside.
5. With a partner, explore space words such as over, under, and around while making body shapes. (Example: one partner makes a shape while the other partner tries to cross over, under, or around).
6. Combine bending and stretching with other locomotor or non-locomotor movements (bend, stretch, swing, jump).
7. Explore a variety of movements involving maneuvering weight (pushing, pulling, lifting) with a group.

STANDARD 2

The students will continue to develop motor fitness including strength, agility, balance, flexibility, speed/reaction time, and endurance.

OBJECTIVES

1. Demonstrate strength by (a) hand walking an overhead ladder, and (b) jumping and reaching 12 inches beyond their standing reach.
2. Demonstrate agility by (a) running in (front door) and jumping a turning rope 10 times and running out (back door), and (b) moving through a simple obstacle or challenge course.

3. Demonstrate balance by (a) hopping twice on one foot and then the other staying within a 2-foot circle for 30 seconds, and (b) performing a stork stand, with the eyes open for 10 seconds, on each foot.

4. Demonstrate flexibility by (a) bending forward and touching the toes while keeping the legs straight, and (b) interlocking fingers, stepping through the hands one foot at a time forwards and backwards.

5. Demonstrate speed/reaction time by (a) running as fast as possible for 50 yards, and (b) moving through a simple obstacle or challenge course.

6. Demonstrate endurance by (a) jogging or running 600 yards, and (b) jogging an accumulated total of 10 miles during two months. (NOTE: This might be done by jogging a minimum of a quarter of a mile a day, 440 yards).

STANDARD 3

The students will follow rules and directions, participate safely, and display respect for personal and general space.

OBJECTIVES

1. Display positive attitudes toward play activities by listening to, following directions, and taking turns.

2. Participate with vigor (enthusiasm) in games of low organization.

3. Recognize good safety practices and avoid behavior that may lead to injury or disruption of activities.

STANDARD 4

The students will expand their manipulative skills using a variety of objects.

OBJECTIVES

1. Invent several different ways to throw an object into the air and catch it.

2. Kick stationary and moving objects.

3. Strike a ball or similar object with the hand or a short handled bat or racket.

4. In groups of four, explore a variety of movements using different objects.

5. Use in exploratory movements mats, boxes, benches, risers, scooters, balance beams, ropes, balance boards, ladders and parachutes.

DANCE COMPONENT

STANDARD 5

The students will continue to combine introductory rhythm and dance movements that include time, space, energy, and shape. (Participant, Observer/Listener)

OBJECTIVES

1. Clap and move in 6/8 time, accenting the first beat of every measure, changing the body part, the direction, the level, or the energy.

2. Move appropriately to a piece of 4/4 music or to a steady beat, e.g., slowly to half notes, moderately to quarter notes, and quickly to eighth notes.

3. With a small group, create a simple dance using the rhythmic pattern of a nursery rhyme, words, or names.

4. Discuss differences between rhythms that can be counted and rhythms that cannot be counted.

5. Express through movement the rhythms found in: (a) nature, e.g., wind, sea, and trees; (b) the body, e.g., breath, pulse, sneeze and tickle; (c) objects-mechanical and nonmechanical, e.g., ball, feather, and eggbeater.

6. Create simple combinations of moving forward, backward, sideward.

7. Create a series of shapes on different levels (low, medium, and high) and design transitions between them, e.g., slow-motion and sustained, sudden or percussive.

8. Improvise a sequence of energy (motion) changes, e.g., moving from lyrical (floating, gliding) to percussive (sharp, quick).

9. Perform traditional and creative singing games and danes such as "Skip To My Lou," "Digga Doe," "Jim Along Josie."

STANDARD 6	The students will develop an understanding of why people dance. (Critic)

OBJECTIVES

1. Brainstorm about why people dance.
2. Discuss dance as a form of nonverbal communication.

STANDARD 7	The students will discuss some of the dances of the cultures studied at Level 3 Geography. (Critic, Participant)

OBJECTIVES

1. Create a simple group dance from a theme such as planting and harvesting, the cycle of the seasons, animal life cycles, or dances based on work activities.

MOVEMENT AND FITNESS COMPONENT

4 - 6

COURSE DESCRIPTION

The core program in movement and fitness for the intermediate grades focuses on the development of body/space awareness and management, basic sports skills, motor fitness, games and sports, and dance forms. Students will gain knowledge about, understanding of, and appreciation for movement and physical activities.

NOTE: The 4-6 dance objectives emphasize the qualities that turn movement into dance and add to a foundation for dance at the secondary level. All should be taught as individual or small group activities. Standards 3 and 9 encourage understanding and experience with the Participant and Observer/Listener roles, while Standards 7 and 8 encourage growth and understanding for the critics role in dance.

LEVEL 4

STANDARD 1	The students will demonstrate, with a partner, body awareness and management as it relates to space, movement, and relationships.

OBJECTIVES

1. Make a variety of geometric designs such as triangles, lines, circles, etc. at different levels.
2. Make symmetrical (in which the two sides look alike), asymmetrical (in which the two sides do not look alike) shapes, e.g., twisted, round, narrow, and wide.
3. Pass, throw, kick, or strike a ball while moving in the same direction as their partner, keeping the same distance apart.

STANDARD 2	The students will continue to develop motor fitness including strength, agility, balance, flexibility, speed/reaction time, and endurance.

OBJECTIVES

1. Demonstrate strength by (a) performing 25 sit-ups, knees flexed, and feet on the floor; (b) performing 15 push-ups; and (c) performing a standing long jump the distance of their height plus 3 inches.

2. Demonstrate agility by (a) jumping a rope turned by self using two or more different arm swings, e.g., forward, backward, criss-cross, and (b) performing the shuttle run from the AAHPER Youth Fitness Test in 11 seconds.

3. Demonstrate balance by (a) assuming a divers stance (on toes) and balance for 5 seconds with eyes closed; and (b) walking forward and backward on a balance beam while balancing an object on some part of the body.

4. Demonstrate flexibility by (a) bending forward and touching toes while sitting on the floor with legs fully extended to the count of five, and (b) grasping the fingers in the middle of the upper back for 5 seconds with one arm over the shoulder and the other behind the back.

5. Demonstrate speed/reaction time by running 50 yards in 8 seconds.

6. Demonstrate endurance by (a) jogging one mile, and (b) participating in the School Golden Sneaker Physical Fitness Award Program.

STANDARD 3

The students will develop the sports skills of catching, striking and foot dribbling.

OBJECTIVES

1. Throw and catch a basketball, football, and softball.

2. Demonstrate striking skills, using the hands as in volleyball and the feet as in soccer.

3. Foot dribble a soccerball 30 feet, changing directions.

4. Hit a slow-pitch softball.

STANDARD 4

The students will observe safety and play by the rules in lead-up games for group activities.

OBJECTIVES

1. Know the rules and strategies in playing a variety of lead-up games.

2. Play safely in group activities and sports.

STANDARD 5

The students will develop basic skills in stunts and tumbling, using simple apparatus.

OBJECTIVES

1. Hang, climb, and travel on a bar using various hand grips.
2. Do a head stand, hand stand, cartwheel, forward and backward roll.
3. Vault over an object.
4. Hang from a bar by your knees.
5. Combine two tumbling or stunt activities.
6. Do a three-point head stand against the wall and hold for five seconds.

DANCE COMPONENT

STANDARD 6

The students will identify and perform a variety of individual dance forms and participate in group dances. (Participant, Observer/Listener)

OBJECTIVES

1. Recognize simple musical forms such as ABA, and simple rounds, and create movement using of these forms.

2. Focus with eyes and body parts while dancing, on different levels and in different directions, i.e., focusing with eyes, chest, elbow, knee, and back.

3. Dance simple rhythmic patterns with various kinds of musical accompaniments. Repeat the rhythmic patterns while adding movement qualities such as sustained, percussive, swing, collapse, and vibratory movements.

4. Create a simple diagram for movement using straight and curved lines and then perform it.

5. Perform basic square dance patterns, e.g., right hand and left hand, both hands around, star, promenade, do-si-do.

6. Perform several traditional folk or national dances such as "Horse and Buggy, "Schottische, "Gustof's Skoal," "Seven Jumps," "Old Dan Tucker," etc.

STANDARD 7	The students will begin to analyze dance. (Critic)

OBJECTIVES

1. Describe another group's dance performance.

2. Identify elements of motor fitness a dancer has to have, e.g., strength, flexibility, endurance, balance, coordination, agility, control.

3. Identify the three parts of a dance, i.e., beginning, middle, and ending.

STANDARD 8	The students will begin to identify the cultural origins of dance. (Critic)

OBJECTIVES

1. Identify dances associated with Utah's pioneer cultures.

2. Invent a dance that the pioneers or indians might have danced.

STANDARD 9	The students will begin to develop their imaginative thinking in dance. (Participant, Observer/Listener)

OBJECTIVES

1. Pantomime sports activities and abstract them into dance. Abstraction can be created by:

   a. Exaggeration (over or under statement).
   b. Distortion.
   c. Repetition.

2. Create their own movement sequence (choreography) or dance.

   NOTE: Students may use one of their previous experiences and convert it into a movement sequence. Teachers may assist students by reminding them that a dance should have a beginning, a middle, and an end.

LEVEL 5

STANDARD 1	The students will demonstrate, in a group, body awareness and management as it relates to time, space, movement, and relationships.

OBJECTIVES

1. Create a variety of geometric designs, e.g., circular, linear, and angular at different levels.
2. Move around a room in a small group. Stop on signal and make various shapes such as narrow, wide, twisted, symmetrical, and asymmetrical.
3. Pass, throw, catch, kick, or strike a ball while moving in one direction in a small group keeping the same distance from one another.

STANDARD 2	The students will continue to develop motor fitness including strength, agility, balance, flexibility, speed/reaction time, and endurance.

OBJECTIVES

1. Demonstrate strength by (a) performing a flexed arm hang for 16 seconds (girls), performing 3 complete chin-ups with palms facing away (boys), and (b) performing 35 sit-ups with knees flexed and feet on the floor.
2. Demonstrate agility by (a) jumping a rope, turned by self as fast as possible, 50 times; and (b) performing the shuttle run from the AAHPED Youth Fitness Test in 10.6 seconds.
3. Demonstrate balance by (a) performing a stork stand for 10 seconds on each foot with the eyes closed, and (b) jumping into the air completing one-half turn and landing on their feet maintaining balance.
4. Demonstrate flexibility by going "through a wand or broomstick" (grapevine).
5. Demonstrate speed/reaction time by running 50 yards in 7.9 seconds.

6. Demonstrate endurance by jogging or running 1 mile in 12 minutes or less, and (b) participating in the School Golden Sneaker Physical Fitness Award Program.

STANDARD 3	The students will improve the sports skills of throwing, catching, dribbling, striking, shooting, passing, and volleying.

OBJECTIVES

1. Dribble a basketball forward and backward.
2. Successfully throw and catch a softball to and from a partner 30 feet away, eight out of ten times.
3. Demonstrate striking skills, using short and long handled instruments such as paddles, bats, and hockey sticks.
4. Demonstrate ability to shoot a basketball through a hoop several different ways.
5. Foot dribble a soccer ball 10 times, alternating feet.
6. Successfully pass a youth football 30 feet to a stationary partner.
7. Volley a training volleyball against the wall as many times as possible in 30 seconds.

STANDARD 4	The students will observe safety and play by the rules in lead-up games and sports.

OBJECTIVES

1. Play lead-up games to three different sports.
2. Play safely group activities and sports.
3. Participate in a variety of games with a minimum of adult direction.

STANDARD 5

The students will combine skills in stunts and tumbling, involving partners.

OBJECTIVES

1. Perform three combinations of tumbling stunts.
2. Do two or more different vaults over an objective, e.g., vaulting box, tire.
3. Create three different stunts or tumbling routines with a partner or group.
4. Perform a 3 point headstand with a spotter.
5. Perform a hand stand with a spotter.

DANCE COMPONENT

STANDARD 6

The students will expand their dance skills and interpretation through a variety of dance experiences. (Participant, Observer/Listener)

OBJECTIVES

1. Experience spatial relationships of meeting, parting, passing, leading, following and mirroring (through improvisation and choreography).
2. Clap and move to complex rhythm patterns. Perform in place, through space, by changing the floor pattern, and through spatial relationships. (Small group activity)
3. Using a combination of two or more movements, demonstrate accents of energy changes involving body parts, directions, and levels.
4. Create and perform a phrase, or short dance, with a sequence taken from a list of energy words, e.g., hover, slither, slash, press, and perch.
5. Participate in an aerobic dance/exercise routine to music for eight minutes.

6. Perform several traditional folk or national dances, e.g., "The Virginia Reel, "Galopede," Hora," "Oh, Johnny," "Patty Cake Polka."

STANDARD 7	The students will continue to analyze dance. (Critic)

OBJECTIVES

1. List ways dancers move in a performance. Discuss/show how dancers move differently than one would expect of people in everyday life.

2. Select three ideas and discuss/show what a dance would be like if the dance were:

   a. Performed in another setting.
   b. Performed in different costumes.
   c. Performed with/without sound.
   d. Performed by people of different sex or age.
   e. Performed at different tempos.
   f. Performed with/without props.
   g. Performed with a different ending.

STANDARD 8	The students will continue to identify the cultural origins of dance. (Critic)

OBJECTIVES

1. Identify dances associated with cultures of the Western Hemisphere.

2. Learn two or more dances from Western Hemisphere cultures and discuss how the environment and/or customs influenced these dances. Examples:

   Cha-Cha - Cuba
   Mexican Hat Dance - Mexico
   Smoky Mountain Clog - America

STANDARD 9	The students will continue to develop their imaginative thinking in dance. (Participant, Observer/Listener)

OBJECTIVES

1. Pantomime simple poems, then extract them into dance using exaggeration, distortion, or repetition.

2. Create their own movement sequence (choreography).

   NOTE: Students may use one of their previous experiences and convert it into a movement sequence. Teachers may assist students by reminding them that a dance should have a beginning, a middle, and an end.

LEVEL 6

STANDARD 1	The students will show spatial awareness and kinesthetic sense in individual and group activities.

OBJECTIVES

1. Jump from a surface 2 or 3 feet above a mat. While in the air, make various shapes such as round, twisted, wide, symmetrical, and asymmetrical, and land with bended knees keeping their balance.

2. Play an assigned position in games such as softball, soccer, touch football, basketball, volleyball, etc.

STANDARD 2	The students will continue to develop motor fitness including strength, agility, balance, flexibility, speed/reaction time, and endurance.

OBJECTIVES

1. Demonstrate strength by (a) climbing up and down the length of a climbing rope (do not slide), and (b) performing a standing long jump the distance of their height plus 3 inches.

2. Demonstrate agility by (a) completing a challenge/obstacle course, and (b) jumping a rope, turned by self, 50 times using the cross-over arm swing.

3. Demonstrate balance by jumping into the air completing a full turn and landing on their feet maintaining balance.

4. Demonstrate flexibility by performing a straddle leg toe touch in a sitting position using both hands to touch the toes.

5. Demonstrate speed/reaction time by running 50 yards in 7.6 seconds.

6. Demonstrate endurance by (a) jogging or running 1 mile in 9 minutes, and (b) participating in the School Golden Sneaker Physical Fitness Award Program.

STANDARD 3	The students will expand sports skills of passing, catching, dribbling, shooting, kicking, striking, and volleying.

OBJECTIVES

1. Pass and catch a basketball, to and from a partner 25 feet away, 8 out of 10 times.

2. Dribble a basketball, 25 feet forward, backward, and sideward, using the right hand and the left hand.

3. Executive a running kick and a drop kick (punt) of a soccer ball 45 feet or more.

4. Volley a training volleyball with a partner back and forth over the net 7 out of 10 times, using the correct form.

5. Serve a training volleyball so that it is playable 6 out of 10 times.

6. Hit a slow-pitch softball beyond the infield.

7. Pass a youth football 30 feet to a moving partner.

8. Shoot a lay-up, foul, jump, and set shot through a basketball hoop.

STANDARD 4	The students will observe safety and play by the rules in lead-up games to traditional team sports.

OBJECTIVES

1. Play in lead-up games to the following traditional sports: volleyball, softball, football, basketball, and soccer.

2. Play safely group activities and sports.

3. Participate in a variety of games with a minimum of adult direction.

STANDARD 5	The students will expand skills in stunts and tumbling involving combinations and music.

OBJECTIVES

1. Invent a variety of jumps off a riser, bench, jumping board, inner tube, etc., including jumping into or through a hula hoop.
2. Catch and throw a ball or other object, while in the air, after jumping from a riser, bench, jump board, or inner tube.
3. Create and perform to music a tumbling or stunt routine involving at least 4 combinations.

DANCE COMPONENT

STANDARD 6	The students will expand their dance skills and interpretation through a variety of dance experiences. (Participant, Observer/Listener)

OBJECTIVES

1. Create in a small group, a diagram for movement on the floor using curved, straight, and zigzag paths and then perform it as a group.
2. Move in syncopation. (Syncopation means an accent in an unexpected place, such as accenting the second beat of a 4/4 meter instead of the first beat.)
3. Clap and move to complex rhythmic patterns.
4. Improvise a simple dance based on a musical selection that suggests changes in quality and energy.
5. Participate in an aerobic dance/exercise routine to music for twelve minutes.
6. Improvise a group dance reflecting another culture.
7. Perform several traditional folk or national dances such as "Trikla," "Tinikling," "Jessie Polka," and "Sauerlander Quadrille," etc.
8. Dance a number of contemporary dances.

STANDARD 7

The students will continue to analyze dance. (Critic)

OBJECTIVES

1. After watching a dance (live, film, or video) describe how it began, what the middle was like, and how it ended.

2. Discuss how the use of costumes, accompaniment, props, lighting, and scenery contribute to dance.

STANDARD 8

The students will continue to identify the cultural origins of dance. (Critic)

OBJECTIVES

1. Discuss dances associated with cultures of the Eastern Hemisphere.

2. Learn two or more dances from Eastern Hemisphere cultures and discuss how the environment and/or customs influenced these dances. Examples:

   Quadrille - English
   Hora - Israel
   Jig - Irish
   Schottische - Scotland
   Polka - Czechoslovakia
   Tinikling - Phillipines

STANDARD 9

The students will continue to develop their imaginative thinking in dance. (Participant, Observer/Listener)

OBJECTIVES

1. Pantomime a painting or sculpture, then abstract it into dance using exaggeration, distortion, and/or repetition.

2. Create their own movement sequence (choreography).

   NOTE: Students may use one of their previous experiences and convert it into a movement sequence. Teachers may assist students by reminding them that a dance should have a beginning, a middle, and an end. Identify such things as repetition, climax, transition, unity, variety, and contrast.

MOVEMENT AND FITNESS

7 - 8

COURSE TITLE	UNIT OF CREDIT		PREREQUISITE
Beginning and Intermediate Fitness, Team Sport Skills, and Recreational and Dance Activities	Level 7 Level 8	0.5 0.5	Mastery of Level 6 for 7 Level 7 for 8

COURSE DESCRIPTION

Students in Levels 7-8 will develop lifetime attitudes regarding physical activity and healthy life-styles during this time. The movement and fitness curriculum is based upon the assumptions that (1) skill development is on-going and progressive, (2) lifetime activity attitudes are best internalized by continued practice, (3) students need to incorporate principles of fitness into their daily lives.

The program is a sequence of experiences in a number of activities that challenge all ability levels. It focuses on social interaction and cognative learning, as well as skill development, with progressive levels of difficulty. A definite scope and sequence should be used in order to motivate students to higher levels of achievement.

STANDARD 1	The students will continue to develop motor and heart-lung fitness and endurance.

OBJECTIVES

1. Participate in a minimum of three aerobic workouts per week of 15 minutes duration.

2. Perform conditioning exercises for flexibility, strength, agility, balance, speed/reaction time, and endurance. Emphasis will be placed on the following major muscle groups: (a) arm and shoulder, (b) abdomen, (c) back, (d) legs.

3. Understand the basic principles of heart-lung fitness, particularly heart rate and training zone.

4. Define muscular endurance, flexibility, heart-lung endurance, strength, aerobic, anaerobic, isotonic, and isometric.

5. Demonstrate the principles of warm-up and cool-down.

6. Cite the hazzards of and ways to avoid extreme fatigue, muscle strain, and irregular conditioning.

7. Explain reasons for selecting appropriate clothing and footwear for specific activities.

STANDARD 2

The students will continue to develop skill in a variety of team sports, recreational activities and dance.

OBJECTIVES

1. Acquire the basic skills and knowledge of rules and strategies needed to participate in at least 5 team sports.

2. Participate in and learn skills of a variety of recreational games and activities.

3. Cite and practice the etiquette of a variety of recreational activities; e.g., golf, tennis, dance.

4. Identify, use, and care properly for equipment used in various sports and recreational activities.

5. Avoid unsafe playing conditions and conduct.

STANDARD 3

The students will expand their dance skills and interpretation through a variety of dance experiences.

OBJECTIVES

1. Recognize that dance has a rhythmic structure that can be musically notated.

2. Create and demonstrate in a small group, an aerobic dance/exercise routine to music that includes at least three contrasting kinds of energy.

3. Demonstrate the basic steps of several ballroom/social dances, e.g., waltz, fox-trot, lindy, two-step, cha cha.

4. Participate in several contemporary dances.

5. Discuss how the use of costumes, music, props, lighting, staging, and scenery contribute to dance.

6. Differentiate between a dance of drama (story), action (movement), and mood (feeling).

7. Perform several traditional folk or national dances.

STANDARD 4	The students will continue to develop leadership, fairness, and courtesy.

OBJECTIVES

1. Develop leadership skills by serving in one or more positions as a leader, team captain, referee, equipment manager, intramural official, timer, scorekeeper, or student aide.

2. Practice fairness and courtesy.

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Participation Skills and Techniques	0.5	Mastery of Level 8

COURSE DESCRIPTION

This one semester course continues to develop participation skills and techniques in a variety of team and individual games and dance activities with emphasis on leadership, courtesy, respect, and fairness. This course also provides instruction aimed at improving and maintaining physical fitness.

NOTE: Of the 1.5 units of credit of Healthy Lifestyles--Movement and Fitness required in the core curriculum, .5 unit of credit may be waived or may be earned by successful completion of two seasons of competitive sports participation. In cases where the .5 unit of credit is waived, the student must complete .5 unit of credit in some other class to achieve the 24 hours of credit required for graduation.

The following activities will not fulfill the Healthy Lifestyles--Movement and Fitness core course requirements for graduation but may be used for an elective credit at the discretion of the school/district: (1) Pep Club, (2) Cheerleaders, (3) ROTC, (4) Songleaders, (5) Marching Bands, (6) Flag Corps, and (7) Rodeo.

STANDARD 1	The students will continue to develop skills in and knowledge of team sports.

OBJECTIVES

1. Demonstrate increased skill competency in five team sports.
2. Demonstrate game strategies for five team sports.

STANDARD 2	The students will continue to develop skills in and knowledge of recreational activities.

OBJECTIVES

1. Demonstrate increased skill competency in five individual sports, activities, or dances.

2. Demonstrate the techniques and rules of five individual sports activities, or dances.

3. Demonstrate game strategies of five individual sports.

STANDARD 3

The students will maintain physical fitness.

OBJECTIVE

1. Maintain an appropriate level of physical fitness including: (a) heart-lung, (b) strength, (c) flexibility, (d) agility, and (e) speed/reaction time.

STANDARD 4

The students will continue to develop leadership, fairness, and courtesy.

OBJECTIVES

1. Continue to develop leadership skills.

2. Practice fairness and courtesy.

FIELD TRIAL

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Fitness For Life	0.5	Participation Skills and Techniques

COURSE DESCRIPTION

This one-semester course helps each student adopt a personal life-style that will achieve physical fitness. Specifically, students will identify and understand all of the components of fitness, such as heart-lung fitness, strength, flexibility, endurance, weight control, nutrition, and stress management including Type A and B behavior.

NOTE: Of the 1.5 units of credit of Healthy Lifestyles--Movement and Fitness required in the core curriculum, .5 unit of credit may be waived or may be earned by successful completion of two seasons of competitive sports participation. In cases where the .5 unit of credit is waived, the student must complete .5 unit of credit in some other class to achieve the 24 hours of credit required for graduation.

The following activities will not fulfill the Healthy Lifestyles--Movement and Fitness core course requirements for graduation but may be used for an elective credit at the discretion of the school/district: (1) Pep Club, (2) Cheerleaders, (3) Songleaders, (4) ROTC, (5) Marching Bands, (6) Flag Corps, and (7) Rodeo.

STANDARD 1

The students will know that heart-lung fitness, strength, flexibility, endurance, weight control, nutrition, and stress management are necessary for a healthy life-style.

OBJECTIVES

1. Demonstrate the principle of heart-lung fitness, i.e., (a) pulse rate, blood pressure, blood cholesterol, (b) aerobic exercises, (c) training zone, (d) intensity, (e) duration, (f) overloading, (g) frequency, (h) safety.

2. Demonstrate the principle of strength fitness, i.e., (a) intensity, (b) duration, (c) overload, (d) progression, (e) frequency, (f) safety.

3. Demonstrate the principle of flexibility, i.e., (a) warm-up, (b) range of motion, (c) intensity--static vs. ballistic, (d) frequency, (e) duration.

4. Demonstrate the principle of muscle endurance, i.e., (a) intensity, (b) difference between muscle strength and muscular endurance, (c) duration, (d) progression, (e) frequency.

5. Demonstrate the principles of weight control and nutrition, i.e., (a) percent of body fat, (b) effects of high and low cholesterol diets on nutrition and weight control, (c) effects of exercise on weight control.

6. Demonstrate principles of stress management including Type A and Type B behavior, i.e., (a) symptoms, (b) causes, (c) potential results, (d) coping skills/reducing risks.

7. Demonstrate principles of predicting life expectancy based on positive or negative health practices.

STANDARD 2	The students will develop, follow, and evaluate their own personal fitness plan.

OBJECTIVES

1. Construct a Health Family Tree.
2. Submit a written personal fitness plan.
3. Follow their personal fitness plan.
4. Evaluate their personal fitness plan.

STANDARD 3	The students will achieve an acceptable level of physical fitness.

OBJECTIVES

1. Demonstrate a level of fitness in each of the following categories as prescribed:

	GIRLS	BOYS
a. Arm and shoulder strength	Flexed Arm Hang* -- 17.0 seconds	Pull-up* -- 10
b. Abdomen strength endurance	Flexed leg sit-ups* -- 35	Flexed Leg sit-ups* -- 46
c. Agility and reaction time	Shuttle Run* -- 10.4 seconds	Shuttle Run* -- 9.2 seconds
d. Leg strength/power	Standing long jump* -- 6 feet 0 inches	Standing long jump* -- 7 feet 9 inches
e. Speed and reaction time	50 yard dash* -- 7.4 seconds	50 yard dash* -- 6.3 seconds
f. Heart-lung fitness	1½ Mile Run* -- 12:0 minutes	1½ Mile Run* -- 10:19 (Min.- Sec.)
g. Flexibility	Arm and Shoulder Reach -- 11 inches Sit and Reach -- Touch Toes	Arm and Shoulder Reach -- 11 inches Sit and Reach -- Touch Toes

h. Body weight is within the recommended Metropolitan Life Insurance Life weight tables for sex, age, height, and bone structure (frame), or within the recommended percent body fat (Boys--15 to 17 percent, Girls--18 to 22 percent)

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* AAHPER Youth Fitness Test Manual, 1976. American Alliance for health, Physical Education, and Recreation; Reston, Virginia.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Individualized Lifetime Activities	0.5	Participation Skills and Techniques Fitness For Life

COURSE DESCRIPTION

Students in this one-semester course will acquire skills in a variety of lifetime activities that contribute to sustained fitness and well-being. These skills and activities offer positive ways to cope with stress and contribute to the quality of life, not only as a student, but as a future adult as well.

NOTE: Of the 1.5 units of credit of Healthy Lifestyles--Movement and Fitness required in the core curriculum, .5 unit of credit may be waived or may be earned by successful completion of two seasons of competitive sports participation. In cases where the .5 unit of credit is waived, the student must complete .5 unit of credit in some other class to achieve the 24 hours of credit required for graduation.

The following activities will not fulfill the Healthy Lifestyles--Movement and Fitness core course requirements for graduation but may be used for an elective credit at the discretion of the school/district: (1) Pep Club, (2) Cheerleaders, (3) Songleaders, (4) ROTC, (5) Marching Bands, (6) Flag Corps, and (7) Rodeo.

STANDARD 1	The students will continue to develop skills in a variety of lifetime activities (including dance).

OBJECTIVE

1. Demonstrate increased skill competency in a minimum of three individual lifetime activities.

STANDARD 2	The students will continue to develop strategies, techniques, and a knowledge of rules, in a variety of lifetime activities (including dance).

OBJECTIVES

1. Demonstrate strategies and techniques of three individual lifetime activities.
2. Demonstrate a knowledge of the rules of three individual lifetime activities.

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Advanced Individualized Lifetime Activities Specialization	0.5	Participation Skills and Techniques Fitness for Life

COURSE DESCRIPTION

As a means of coping with stress and contributing to the fitness and well-being of the individual throughout life, the students in this one-semester course will select a lifetime activity in which they will specialize.

NOTE: Of the 1.5 units of credit of Healthy Lifestyles--Movement and Fitness required in the core curriculum, .5 unit of credit may be waived or may be earned by successful completion of two seasons of competitive sports participation. In cases where the .5 unit of credit is waived, the student must complete .5 unit of credit in some other class to achieve the 24 hours of credit required for graduation.

The following activities will not fulfill the Healthy Lifestyles--Movement and Fitness core course requirements for graduation but may be used for an elective credit at the discretion of the school/district: (1) Pep Club, (2) Cheerleaders, (3) Songleaders, (4) ROTC, (5) Marching Bands, (6) Flag Corps, and (7) Rodeo.

STANDARD 1

The students will continue to develop skills in their selected lifetime activity (including dance).

OBJECTIVE

1. Demonstrate a high level of skill in at least one individual lifetime activity.

STANDARD 2

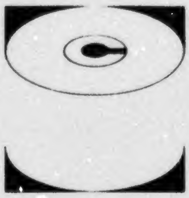
The students will continue to develop and refine strategies and techniques in their selected lifetime activity (including dance)..

OBJECTIVE

1. Demonstrate advanced strategies and techniques for at least one individual lifetime activity.

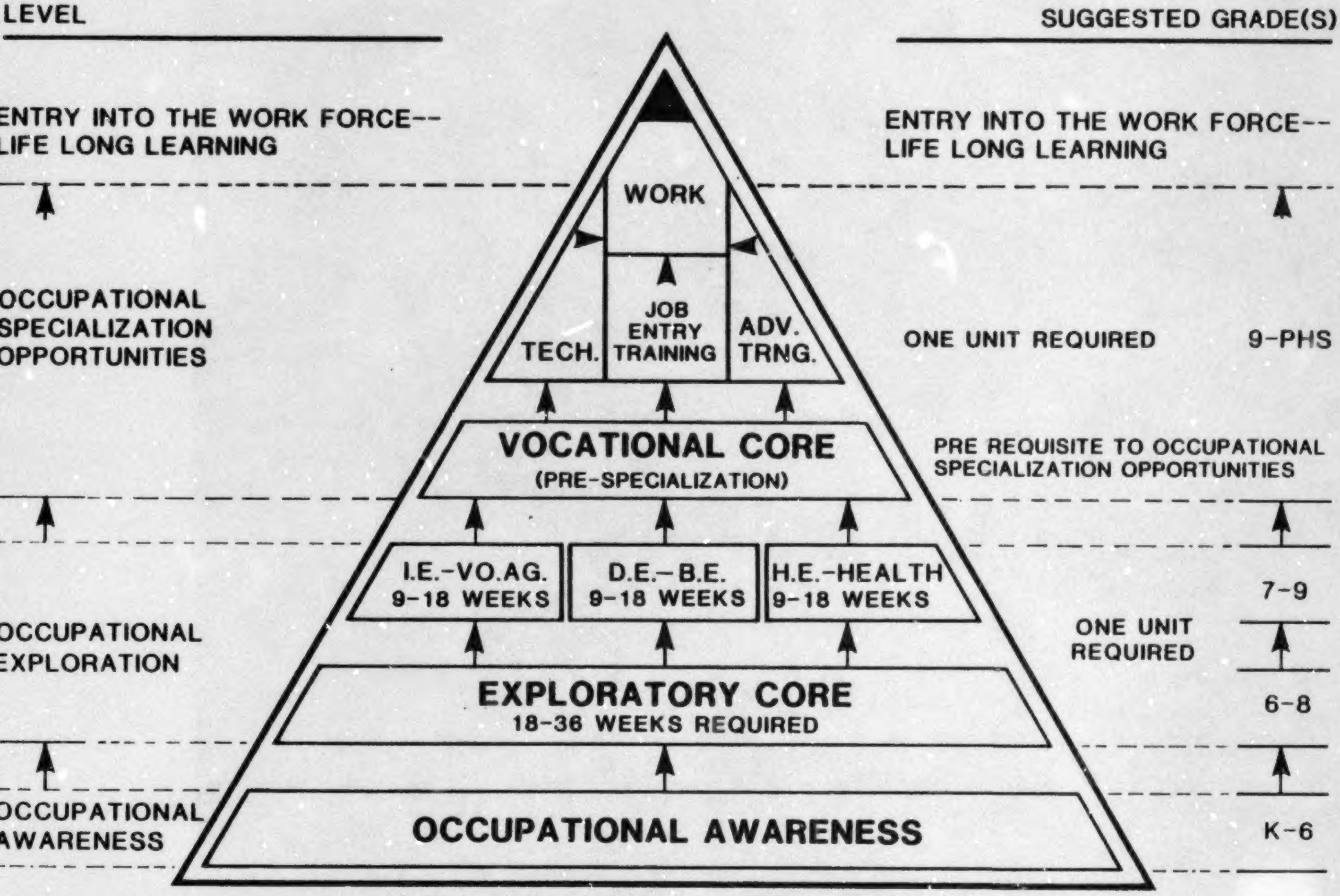
Section H

VOCATIONAL EDUCATION



RECOMMENDED

FIELD TRIAL


LEVEL
SUGGESTED GRADE(S)
ENTRY INTO THE WORK FORCE--
LIFE LONG LEARNING
WORK
JOB ENTRY TRAINING
TECH.
ADV. TRNG.
ENTRY INTO THE WORK FORCE--
LIFE LONG LEARNING
OCCUPATIONAL SPECIALIZATION OPPORTUNITIES
ONE UNIT REQUIRED
9-PHS
VOCATIONAL CORE
(PRE-SPECIALIZATION)
PRE REQUISITE TO OCCUPATIONAL SPECIALIZATION OPPORTUNITIES
I.E.-VO.AG. 9-18 WEEKS
D.E.-B.E. 9-18 WEEKS
H.E.-HEALTH 9-18 WEEKS
7-9
ONE UNIT REQUIRED
OCCUPATIONAL EXPLORATION
EXPLORATORY CORE
18-36 WEEKS REQUIRED
6-8
OCCUPATIONAL AWARENESS
OCCUPATIONAL AWARENESS
K-6

RECOMMENDED

VOCATIONAL EDUCATION PROGRAM OF STUDIES

FIELD TRIAL

CORE CURRICULUM FOR VOCATIONAL EDUCATION

9 - 12

COURSE TITLE	UNIT OF CREDIT	PREREQUISITE
Vocational Core (CIP No. 13.9994)	1.0	Mastery of Level 8 Vocational Core

COURSE DESCRIPTION

The vocational core: (1) surveys and assesses the vocational implications of current and developing technologies: (2) introduces applications of the free enterprise system; (3) develops management skills, attitudes and habits; and (4) assists the development of the Student Education Plan. Throughout the core, the emphasis is on applied activities.

TECHNOLOGICAL-TRENDS-IN-VOCATIONAL-EDUCATION COMPONENT

STANDARD 1

The students will demonstrate knowledge of the characteristics of various technological levels.

OBJECTIVES

1. Identify characteristics of a low-technology product.
2. Identify characteristics of a medium-technology product.
3. Identify characteristics of a high-technology product.
4. Design and construct a low-technology product.

STANDARD 2

The students will define terminology important in the technology education discipline.

OBJECTIVES

1. Define the following terms common to all vocational areas:

    technology
    technological assessment
    appropriate technology
    systems
    subsystems
    technological forecasting
    impacts of technology,
    ergonomics
    high technology
    technological literacy

2. Define the vocabulary that is unique to each vocational area:

   health
   agriculture
   industrial education
   home economics
   business education

STANDARD 3

The students will apply current and emerging technologies in vocational education.

OBJECTIVES

1. Use a microcomputer successfully.
2. Program an educational training robot correctly.
3. Program a CAD/CAM educational trainer correctly.
4. Conduct experiments with a Class II neon-helium laser.
5. Use word processing, spreadsheet, data base, and computer accounting programs on a microcomputer.
6. Use and properly maintain advanced-technology home appliances.
7. Explain the advantages modern technology offers a wage earner/homemaker.
8. Identify the use of advanced technology in home economics related occupations, the health care field, and agriculture.

APPLICATIONS-OF-THE-FREE-ENTERPRISE-SYSTEM COMPONENT

STANDARD 1	The students will apply the concepts of the free enterprise system to the work place.

OBJECTIVES

1. Explain the need for cooperation between management, labor and government.
2. Explain how a mixed-market economy functions.
3. Identify how jobs are created through open competition.
4. Define the individual's role, rights, and responsibilities as a worker in a free enterprise system.

STANDARD 2	The students will identify "entrepreneureal" opportunities in the free enterprise system.

OBJECTIVES

1. Identify how a business is operated.
2. Solve a "hands-on" management problem.
3. List the skills and personal qualities an individual needs to succeed as an entrepreneur.
4. List the advantages and disadvantages of private business ownership.

STANDARD 3	The students will identify the changes and analyze the issues affecting workers in today's economy.

OBJECTIVES

1. Identify the trends in today's work force.
2. Analyze the technical and service occupations.

3. Explain the type and level of training needed for a variety of jobs.

4. Explain how new technology and automation affects workers today.

5. Assess how business affects the standard of living.

6. Predict how economic changes may affect workers.

RESOURCE-MANAGEMENT-FOR-LIVING-AND-WORKING COMPONENT

STANDARD 1	The students will identify the available and potential resources of the wage earner/homemaker.

OBJECTIVES

1. Explain the various uses of human, time, money, and energy resources.
2. Use resource management skills to find a place to live and maintain, to be well fed and adequately clothed, and make other wise consumer choices.
3. Use resource management skills to budget time and energy at home and on the job so that the homemaker/wage earner feels satisfaction with both careers.
4. Use resource management skills to manage money better.

STANDARD 2	The students will demonstrate positive personal relations, problem solving, and the decision making skills.

OBJECTIVES

1. Apply effective interpersonal relations skills.
2. Practice essentials of mental, physical, and social health.
3. Explain the advantages of good personal appearance.
4. Apply problem solving skills in making independent and group decisions.
5. Identify the skills necessary to cope with stress, change, conflict, and success.
6. Explain the value of leisure time and plan for it.

CAREER-SELECTION-AND-PREPARATION-FOR-WORK COMPONENT

STANDARD 1

The students will identify their personal characteristics (interests, strengths, values, personality, and life style preferences), and relate them to occupational choices.

OBJECTIVES

1. Identify needs, wants, and interests as they relate to working for a living.
2. Identify personal strengths and weaknesses and explain how they affect career decisions.
3. Explain how needs and wants are related to career choices and life style preferences.

STANDARD 2

The students will use the decision making process to develop personal goals for education, training, and future employment.

OBJECTIVES

1. Identify a variety of resources for occupational information.
2. Explain the process for solving problems and making decisions and its value for dealing with change.
3. Set career goals for one or two career clusters.
4. Project a plan of education/training and work experience for meeting each goal.
5. Identify personal and environmental barriers to reaching career and educational goals, then actions that may be taken to overcome the barriers.
6. Complete a comprehensive Student Education Plan (SEP) for the high school years.
7. Explain the importance of being prepared to deal with change during one's career.

STANDARD 3

The students will demonstrate skills necessary to seek and secure a job.

OBJECTIVES

1. Apply for and obtain a Social Security Card.
2. Prepare a job application resume .
3. Identify at least two references.
4. Name and use at least ten sources of job opening information.
5. Write a letter of application for employment.
6. Arrange for a job interview.
7. Complete a job application.
8. List steps in preparing for a job interview.
9. Describe proper conduct during a job interview.
10. Write a follow-up letter.

STANDARD 4

The students will identify factors important to job satisfaction and retention.

OBJECTIVES

1. Define authority and explain the role of authority in relationships between employees and employers.
2. Describe the major responsibilities of employees and employers.
3. Define supervision and explain its importance in employee training and job performance.
4. Explain what is meant by loyalty to an employer and to an organization.
5. Explain the importance of "getting along" with fellow workers.